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ABSTRACT

The 3-year project was intended to provide for a systematic delivery of career development experiences within each of the three institutions involved--Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region--with central activity located in the Fayette County Schools. Major project themes centered on cooperative effort which would result in a comprehensive career development program for all students (K-14+). Project objectives focused on community involvement, career awareness, career exploration, career preparation, guidance and counseling, dissemination, and teacher education. During the first two years emphasis was directed at development of personnel (teachers, counselors, and principals) working at the four pilot schools. The second year was devoted to preparing coordinators to assume responsibility for the installation of career development in Fayette County. The third year was totally devoted to diffusion of career development activities to other schools, and preparation for continuation of project activities. This report provides a full description of the project and is divided into eight sections: Summary of Report; Problem; Goals and Objectives; Results and Accomplishments; Evaluation; Conclusion, Implications, and Recommendations; and Bibliography. (SH)

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FINAL REPORT

PROJECT NUMBER: F4-216-VM

GRANT NUMBER: OEG-0-73-5316

A COOPERATIVE CAREER EDUCATION PROJECT INVOLVING THE FAYETTE COUNTY SCHOOLS, EASTERN KENTUCKY UNIVERSITY, AND CENTRAL KENTUCKY VOCATIONAL REGION

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

John D. Jenkins

Eastern Kentucky University
Richmond, Kentucky 40475

November, 1976

VOLUME I

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CE 010 105

OUTLINE FOR PROGRAM PERFORMANCE REPORTS
ADULT, VOCATIONAL, AND EDUCATION PROFESSIONS DEVELOPMENT ACT (EPDA) PROGRAMS

1. PROJECT NO.:	2. GRANT NO.:
F4-216VM	OEG-0-73-5316

3. TITLE OF PROJECT: A Cooperative Career Education Project Involving the Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region

4. GRANTEE ORGANIZATION:	5. PROJECT DIRECTOR:
Eastern Kentucky University	John D. Jenkins

6. PERIOD COVERED: FROM	TO
July 1, 1975	June 30, 1976

7. ACCOMPLISHMENTS *(including significant findings)* DURING THIS PERIOD. *(Key to approved project objectives. For educational personnel training programs, include progress made toward placement of trainees and institutionalization of programs.)*

8. MAJOR ACTIVITIES AND EVENTS.

9. PROBLEMS.* *(Describe any departures, including timing, from the original project plan; discuss special problems encountered or expected.)*

10. PUBLICITY ACTIVITIES.* *(Itemize all newspaper or magazine articles or other published materials about your project. A copy of each item should be attached. List all visits to the project site by educators from other organizations.)*

11. DISSEMINATION ACTIVITIES.* *(Describe method of dissemination; identify recipients of dissemination activities.)*

12. PROGRESS ON DATA COLLECTION AND EVALUATION PLANS AND PROCEDURES.*

13. OTHER ACTIVITIES.*

14. STAFF EMPLOYMENT AND UTILIZATION.* *(Note any changes in staff personnel or staffing plans by additions, departures, or revisions of percentage of time or other commitments to the project.)*

15. STAFF DEVELOPMENT.* *(Describe any inservice training for teachers, counselors, and supervisors and any other activities of a professional nature for project staff.)*

* IF THERE IS NOTHING TO REPORT IN THIS SECTION, WRITE N/A.

16. PARTICIPANT CHARACTERISTICS:

a. FOR ADULT EDUCATION TEACHER TRAINING *(13.402)* AND ALL EDUCATION PROFESSIONS DEVELOPMENT PROGRAMS *(13.416, 13.417, 13.503, 13.504, 13.505, 13.506, 13.545, and 13.546)* PROVIDE THE FOLLOWING DATA FOR PARTICIPANTS:

PARTICIPANTS	AMERICAN INDIAN		ORIENTAL		NEGRO/ BLACK		SPANISH-SURNAMED		ALL OTHERS		TOTALS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
PRIMARY[1]											
ADMINISTRATORS											
GUIDANCE COUNSELORS											
TEACHER COUNSELORS											
TEACHER MEDIA SPECIALISTS											
TEACHER TRAINERS											
TEACHERS											
PARAPROFESSIONALS											
OTHERS *(Specify)*											
SECONDARY[2]											
TOTALS											

1 PARTICIPANTS FOR WHOM THE TOTAL PROJECT WAS DESIGNED
2 PARTICIPANTS WHO RECEIVED PARTIAL, SHORT-TERM, OR INTERMITTENT TRAINING.

b. FOR ADULT EDUCATION SPECIAL PROJECTS *(13.401)* PROVIDE THE FOLLOWING DATA FOR TARGET GROUPS:

AGE GROUPS	AMERICAN INDIAN		ORIENTAL		NEGRO/ BLACK		SPANISH-SURNAMED		ALL OTHERS		TOTALS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
16 - 24											
25 - 34											
35 - 64 OR OVER											
TOTALS											

SIGNATURE OF PROJECT DIRECTOR: _____ DATE: November 23, 1976

OSA DC 75-8037

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SUMMARY OF THE REPORT

July 1, 1975 to June 30, 1976

Goals and Objectives

The goals and objectives which were listed in the project proposal consisted of process objectives followed by more specific product goals. The objectives related to various areas of project concern. The process objectives are given below to help the reader understand the major areas of project activity. Product objectives, which help to explain the process objectives are given in the body of this report.

Staff Development

To provide a comprehensive program of in-service education to selected staff members so that they might effectively carry out their particular responsibilities in the implementation of the career education program in the pilot schools.

To develop an in-service program model for staff which will be used to implement career education programs in the remaining schools in Fayette County as well as school systems outside Fayette County.

Community Involvement

To establish a framework within the school program that will permit extensive utilization of community resources, including personnel, in all facets of the school program.

Career Awareness

To orient the learning activities; reading, writing, computing, etc.; in grades 1-6 with career related experiences based on the developmental levels of students.

Career Exploration

To establish a career exploration component in the existing junior high school curriculum which will involve the teachers of all subject matter areas and allow the students to explore several career clusters.

Career Preparation

To provide an instructional program that will prepare all students, for one or more possible roles, to include: 1) immediate employment upon graduation, 2) continued education based on a career goal (e.g. technical training at less than the college level, apprenticeship, college, or adult education), 3) immediate employment prior to graduation (drop-out or stop-out), and 4) concurrent employment and education (part-time student and part-time work).

Guidance and Counseling

To integrate a program of guidance and counseling with instructional programs at all grade levels (1-14), that is appropriate to the developmental level of the students, focuses on helping students improve their self-understanding and knowledge of the occupational world.

Dissemination

To provide dissemination of information to several groups including other schools within Fayette County, other systems within Kentucky, teacher education programs, parents of the students, the community in general, and other interested persons within and outside Kentucky.

Teacher Education

To incorporate career education concepts and methodology into existing pre-service and inservice teacher training curricula at Eastern Kentucky University.

There was a revision of the goals to help teachers more effectively work with the curriculum and it was done so that it would be consistent with the goals included in the proposal. These goals were carefully prepared to be consistent with the goals in the proposal. A separate set of goals was prepared for each level - elementary school, junior high, and high school. The revised objectives are also listed in the body of this report.

Procedures

Major emphasis was placed on professional staff development. The thrust of staff development was to cause the staff to internalize career education to the extent that they would become self-sufficient

when project funding ended. Those included in the inservice activities were teachers, counselors, principals, librarians, curriculum supervisors, and general administrators. The thrust of the staff development effort was to accomplish the project goals through the expertise of the professional staff in the schools and those responsible for educational decision making.

In addition, the project was concerned with providing support systems and services to the professional staff in the schools. Examples of these activities were the relationships established with community resources, material dissemination, and coordination of activities among schools and between the central administration and the schools.

Results and Accomplishments

Staff Development Groups. The greatest project staff effort was directed at staff development. The groups served by the project included staff from the Department of Instructional Services, Pupil Personnel Services, and General Administration. While the majority of staff development was coordinated by the project staff, subject area coordinators (supervisors) and staff from Eastern Kentucky University conducted many of the inservice sessions. Differences in the thrusts each year caused the staff to utilize several inservice strategies.

A significant amount of project staff time was devoted to staff development activities with subject area coordinators. This was viewed as an investment because it effectively expanded the size of the staff concerned with implementing career education in the Fayette County Schools. Also, it permitted individuals with subject area expertise and established credibility (with teachers) to assume leadership roles in staff development. Another benefit of working with subject area coordinators was the fact that a group of leaders would remain in the Fayette County Schools after the project ended.

Staff Development Activities. Because of the different thrusts during the three years of the project and because of the nature of the staff, several staff development (inservice) strategies were used. Some of the activities were used during all three years of the project while others were used to deal with specific situations. Below is a list of staff development activities which were used during the three years of the project.

1. Workshops. Used primarily when schools were not in session and with groups who were not restricted by daily school schedules. The primary purpose of workshops was for the introduction of broad information to large groups. It was found

that workshops were not suited to the accomplishment of detailed understanding and that workshops of long duration (more than two days) were of less value than shorter duration or other kinds of inservice activities.

2. Released-time Inservice. The most widely used kind of inservice were the released-time inservice activities. The activity was used exclusively with teachers. Substitute teachers were provided to free teachers from their instructional responsibilities. This activity permitted teachers from several schools to work together on common problems and also provided the opportunity for appropriate subject area coordinators and project staff to work with teachers in a one-to-one relationship on specific problems. There was evidence that released-time inservice was most effective when the sessions were directed at accomplishing specific goals with which teachers could relate to their classroom responsibilities.

3. College-University Classes. Classes, offered by Eastern Kentucky University and the University of Kentucky were offered during each year of the project. The classes were given for graduate credit and included both elementary and secondary staff. University personnel and project staff worked together to develop the goals of the classes. In each case, the experiences of the courses were directed at the development of activities for use by the teachers in their classrooms. In terms of cost effectiveness, these courses yield greater results than any other kind of inservice activity used during the three years of the project. The greatest limitation was that not all of the staff were interested in obtaining college credit.

4. System-wide Inservice. The Fayette County Schools designated certain days throughout the year for the purpose of inservice. The staffs of several schools requested that career education be the topic of certain inservice days. Beyond the planning responsibilities, these days provided the opportunity for some low cost dissemination activities. In several cases these inservice sessions were followed up with inservice activities designed to deal with more specific problems.

5. Saturday Sessions. Some faculty members did not want to leave their classrooms for inservice activities, but were willing to work on Saturdays. This was not widely used because most faculty do not like to meet on Saturdays.

6. Unscheduled Inservice. In addition to the above planned activities, project staff and subject area coordinators worked extensively with faculty during planning periods and after school hours. While these activities cannot be documented as accurately as the other kinds of inservice, the results contributed significantly to the total accomplishment of the project.

Staff Development Summary

The magnitude of inservice activities which could be documented is detailed in the main body of the report. The figures illustrate both the numbers of staff involved in inservice activities and the depth (number of hours) of inservice development with various staff. Staff from all 44 schools in Fayette County were reached with inservice activities over the three years of the project. At the elementary school level 602 faculty, representing over ninty percent (90%) of the faculty, have been involved in inservice activities. Junior high school faculty involved in inservice included 469 members which was in excess of ninty-five percent (95%) of all junior high school faculty. The 365 high school faculty members involved in inservice activities represented over ninty-five percent (95%) of the high school faculty in Fayette County. The total number of hours of inservice activities at the elementary, junior high and high school levels were 8,770; 7,333; and 7,240 respectively.

Materials Development

Materials development was not one of the major goals of the project but several materials were developed during the three years of the project. There were two main reasons for material development. The first was as an inservice strategy to help the teachers focus on the accomplishment of specific goals rather than generalities. The second purpose was to generate special use kinds of material such as the self development guide for the elementary schools and the slide series for use with the introduction of the communication cluster in the junior high schools.

Community Involvement

Involvement with the community included developing relationships with several groups and identifying individuals and/or groups who would assist school staff. Specific activities included regular meetings with groups such as the Chamber of Commerce, Rotary Club, Junior Womens League, Associated General Contractors, etc.; organization

of an advisory committee to aid in development and continuation of career education in Fayette County; and the development of the Community Resource Guide.

Planning for Career Education Continuation

From the beginning of the project concern was always given to continuation of career education beyond project funding. To accomplish this provision has been made for continued staff development by building a cadre of staff with expertise and responsibility for staff development, organizing an active advisory committee, construction of additional vocational education facilities, continuation of st-ff to work with career education, and the preparation of a package for system-wide planning for implementation of career education throughout the Fayette County Schools.

Evaluation

Project evaluation was the responsibility of Development Associates, Inc. The plan for evaluation complied with the guidelines specified by the U.S. Office of Education for completing the third-party evaluation. The data reported in this document reflect information about teachers and students who were involved in project activities as well as information relating to project management. It should be noted that the evaluation design was uniquely planned to attempt to more accurately associate student performance with teacher involvement in project activities. This technique was used because dissemination had been so extensive that it was impossible to identify real control schools.

Conclusions

1. The greatest amount of inservice during the first two years of the project was directed at staff in the four (4) pilot schools as was planned in the project proposal. However, staff from other schools were involved during the second year. This was done to expand the base of expertise in certain subject areas and to begin dissemination as early as possible. The benefits were realized during the third year of the project.

2. As has been found in other similar projects, enthusiastic leadership in the schools yielded more effective results than when the leadership was passive toward career education.

3. The following are conclusions which related to staff development:

   a. There was a direct positive relationship between the amount (number of hours) of staff development and the involvement of staff in implementing career education activities. Conversely, only minimal implementation was undertaken by those staff who had a small amount of staff development.

   b. Staff development activities, beyond a minimum of introductory information, yielded greater results when they were goal oriented.

   c. There may be some benefits gained from distributing staff development experiences over a period of time with regular intervals between meetings rather than attempting to accomplish the same experiences in a continuous situation.

   d. From a cost effectiveness point of view, college or university type courses may yield more than "in-house" type of inservice activities providing that the courses are planned so that the students are able to deal with situations relating to their work setting.

4. While it is essential that effective community relations be established, but it should be recognized that considerable time is involved, contacts must be followed-up on a regular basis and traditional high school schedules inhibit the use of community resources.

5. The development of materials has limited value beyond the local situation because of the limited resources available, however in certain situations, material development activities can help groups focus on specific goals.

6. Effective measures of staff activity may be a very meaningful evaluation criteria for short-term projects where it is difficult to detect changes in student behavior.

7. Continuation of activities beyond funding requires attention to several factors including keeping dependence on recurring cost at a minimum, thorough staff development, development of meaningful administrative leadership, obtaining community support, maintaining continued visibility, and planning for continued evaluation.

Implications

1. When it is not possible to conduct intensive inservice for all staff it may be useful to focus on the development of a smaller cadre of individuals than to attempt to work with large groups in a superficial way.

2. When administrative leadership is given, results may be obtained with less inservice than in situations where administrative support is not apparent or passive.

3. Consideration should be given to not implementing career education in a school unless there is clear administrative support.

4. Intensity of staff development is an important consideration to successful implementation of career education in the schools.

5. Staff development activities should be planned so that participants engage in goal oriented activities.

6. College and university level courses may yield staff development results which are as effective as "in-house" inservice at a lower cost.

7. Career education efforts cannot be successful without meaningful involvement of individuals and groups in the community.

8. The expectation of massive changes in student performance may be unreasonable for short-term projects. It may be useful to identify other measures which will yield indications of future success.

9. Unless continuation of project activities beyond funding is a major consideration at the beginning of the project, difficulties will likely be encountered at the end of the project.

Recommendations

1. When implementation of career education must take place with large numbers of students in several schools, it is suggested that consideration be given to the development of key leaders as well as to provide orientation to other staff members.

2. Projects should be designed so that maximum implementation responsibility will rest with school staff with minimum dependence on project staff.

3. Career education activities should not be initiated in a school unless the administrative leadership is willing to demonstrate commitment beyond verbal support.

4. Major project resources should be directed at staff development rather than on acquisition of materials.

5. Staff development activities should be directed at attainment of specific goals during the early stages of implementation.

6. Projects should consider the use of college-level courses in addition to the use of traditional methods of staff development.

7. Career education projects should include, as a major component, provision for developing relationships with the community.

PROBLEM

The problem of the project was to examine systems, for the purpose of modifying existing programs and activities and/or installing new activities in the Fayette County Schools, to assure that students would have planned career development experiences throughout their educational program. It was of major concern that the educational experiences include provisions for students to acquire an understanding of the relationship among several life roles including the family, avocational, civic, aesthetic, and occupational.[1] There was a recognition that such a system would emphasize learning experiences which would prepare students to make decisions about how they wanted to function in life and also provide opportunities to gain knowledges, skills, and attitudes for successful life performance.

The concept of the world of work as a central organizing theme was a central issue in the development of the program. That is, participation in the world of work has the potential of having a more profound influence on the quality of an individual's life style, it facilitates or restricts other activities. It was assumed that no effective decision making regarding career and life preparation could be accomplished with significant emphasis on various aspects of the world of work.

A major philosophical difference appeared to exist between traditional educational programs and educational programs which emphasize career development. Traditional programs focus on, and provide significant rewards for, preparing students for the next educational step. For example, third grade teachers prepare students to enter the fourth grade; fourth grade teachers prepare students to enter the fifth grade. The process is based on the assumption that each student will complete post-graduate education. While educational programs designed to prepare students for the next educational level has not in itself reflected an inadequate program, unless experiences are provided for students to examine some life outlets for the education, it has only abstract meaning for students. It was proposed that career oriented experiences, which are directed at helping students recognize some life utility in learning, would increase student interest as well as help prepare for making self-satisfying decisions about life goals.

Accomplishment of the goal outlined above would be difficult to accomplish in isolation. More specifically, one institution, working independently would have less opportunity for success than if related educational institutions and other resources of the community were directed at fulfilling the goal. Involvement of multiple educational institutions and community

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[1]Kieth Goldhammer and Robert E. Taylor, Career Education - Perspective and Promise, Columbus, Ohio, Charles E. Merrill Publishing Company, 1972.

resources presents unique problems which are not normally encountered with traditional programs. In an effort to deal with the problem of developing a comprehensive career program these educational institutions were involved in the development of the project proposal and the conduct of the project. The institutions involved were the 1) Fayeet County Schools, 2) Central Kentucky Vocational Region, and 3) Eastern Kentucky University. It was planned for each institution to provide their unique contribution toward the establishment of a comprehensive career education program.

The Fayette County Schools were responsible for providing students with experiences which will lead to initial career decision making. Activities, based on the developmental needs of students, were to be included in grades 1-12 with emphasis on self-development and occupational awareness, exploration, and preparation. It was planned for students to have thelopportunity to examine various life styles and the interrelationships of life styles and occupational selection, preparation, and participation.

The Central Kentucky Vocational Region represented one of the major elements of career preparation. The Central Kentucky Vocational Region serves both secondary and post-secondary students from the Fayette County Schools, but is operated by the State Department of Education. It was felt that the involvement of the Central Kentucky Vocational Region was essential if maximum opportunities were to be available to students.

Eastern Kentucky University has two kinds of responsibilities to a comprehensive career education program. The first is to produce a continuing supply of professional educators who are qualified to teach in school situations which are placing emphasis on career development. The second role is the preparation of people who can assume productive roles in the world of work. With the professional educator development, both preservice and inservice preparation are required.

In preparation for the project, each institution identified problems which were unique to their institution. These problems were perceived to be areas which the project would need to deal with in order for the project to be successful. That is, a reduction or elimination of the problems would facilitate an effective career development program. Several of those problems follow.

Related Fayette County Problems

The following items were identified by personnel in the Fayette County Schools as areas which need improvement if career education was to be successful in the schools. While there was no expectation of eliminating the problems during the grant period, it was anticipated that many of the problems could be reduced. No attempt has been made to place the items in priority order. The problems listed are those that existed prior to initiation of the project. Potential solutions to many of the problems have already been implemented.

1. There was an insufficient number of course offerings at the upper level of the secondary schools which direct themselves toward career preparation. While additional vocational education offerings would reduce the problem, it was expected that new offerings, not traditionally considered to be vocational, would reduce the problem.

2. Many of the general education courses (grades 1-12) tended to be too academic and focus on abstract concepts without helping students associate the learning experiences to life situations.

3. Experiences within courses, which permit students in grades 7-9 to explore or experience career possibilities, were not representative of the total economic system.

4. Like many school systems, utilization of community resources had been restricted because of scheduling pattern and administrative inconvenience. This problem was more acute at the secondary level than at the elementary level.

5. Program offerings specifically designed for handicapped and disadvantaged students to gain social and economic independence were inadequate to meet the needs.

6. While the Fayette County Schools were concerned with the dropout problem, a systematic program to reduce dropouts had not been implemented.

7. Program articulaion had been, and will probably continue to be, a problem in larger school systems. The problems associated with articulation of educational programs have become more visible as the project has progressed, but many positive results have seemed to emerge.

8. Providing and assisting the staff with the interpretation of resources and materials for a major curriculum revision introduced unique and conflicting problems. While these problems were frequently emotional and psychological, there were logistical problems to which the school system needed to address itself. This problem was even more profound when considered in the context of system-wide diffusion of the curriculum efforts.

9. School personnel had traiitionally not been oriented toward the concept of 100% placement. Success was shown in the area of college placement but much less effort had been directed at job placement, follow-up of on-the-job progress, or placement in educational situations of less than the baccalaureate degree.

10. Many educational personnel lacked knowledge of placement opportunities other than those existing in higher education. The lack of knowledge and experience with both work and educational opportunities, other than higher education, inhibited their ability to assist students with the implementation of varied career goals.

11. Guidance personnel and teachers often viewed themselves as functioning independently from each other. As a result there was less than adequate communication and there were few coordinated activities involving both groups.

12. Much of the assessment efforts had been directed toward a concern for academic progress and prediction as it relates to collegiate success and placement. Physiological, social, student interest and other data which are basic for effective career decision making were not systematically collected and utilized in counseling with students and parents.

13. Many of the professional eduacators were products of a system of traditional preparation. As such, they were heavily influenced by the philosophy of the professions and higher education programs. Too few had work experience or had an understanding of world of work applications of their subject area.

14. Job placement had been a concern of most of the staff in schools but there was not a coordinated mechanism in operation. Compounding the problem was a lack of current manpower data.

15. Involvement with the community had always been a concern of the schools, but career education required more extensive involvement. In addition there was the need to involve the community in ways not previously attempted.

16. Evaluation had generally been limited to an examination of academic achievement. In addition to these important data, other accountability measures needed to be explored.

17. The school system was highly dependent on state operated upper level, secondary and post-secondary vocational and technical schools. In the past, cooperation had been extremely positive between the two agencies, but it was apparent that future demands would create the need for an expanded cooperative effort in providing career preparation opportunities for high school age youth.

18. Attitudes of parents could have inhibited the effective progress of a career education effort. Preoccupation with college education as the only viable alternative for their children, general apathy for the value of education and especially vocational education, and attitudes which are observed by students at home were among the elements which contributed to the problem.

19. There was a current lack of a supply of preservice teachers who had been trained to deal with career development as an integral part of the total curriculum. Such a situation required the need for continuing local inservice activities.[2]

The Fayette County Schools had recognized some of the needs which were ultimately addressed by the career education thrust as early as the 1963-64 school year. Several efforts were implemented during that period of time that provided more effective programs. Below is a partial list of activities initiated prior to the project funding.

1. Work-study programs for physically and mentally handicapped students.

2. Vocational pilot program for trainable mentally retarded (TMR) students to determine the extent to which they can be assisted in becoming self-supporting members of society.

3. Installation of Cooperative Work Experience (COE) programs in all of the four high schools for students who were identified as potential dropouts.

4. Addition of reading specialists to the system's vocational education staff to work with students enrolled in vocational programs.

5. Improvements to junior high school programs to provide for programs oriented toward real life experiences, with the individual and his career role in society being a central focal point. Examples of two activities are ninth grade cluster related program and "The World of Construction" and "The World of Manufacturing" programs in industrial arts.

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[2]Eastern Kentucky University, "A Cooperative Career Education Project Involving the Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region." (Mimeographed), Proposal submitted to the U.S. Commissioner of Education under the provision of Section 142 (c) of Part D of the Vocational Amendments of 1968, December 16, 1972, pages 4-7.

6. Initial work toward initiating a career awareness program in the elementary schools began in the 1971-72 school year.

7. Attempt to assess student and parent interest in career preparation programs. Results of the assessment activitiesrrevealed that both students and parents expressed a need for such programs.

8. Installation of Cooperative Education and Semi-Cooperative Education experiences include Distributive Education and Business and Office programs. The Home Economics Child Care program provides for both in-school and on-the-job experiences.

Related Eastern Kentucky University Problems

Eastern Kentucky University is a coeducational public institution of higher education, located twenty-six miles southeast of Lexington in the community of Richmond. Historically, Eastern Kentucky University has functioned as one of the Kentucky regional teacher education institutions and, while more teachers are prepared at Eastern Kentucky University than any other Kentucky college or university, many other programs are available to students. The change from an institution with essentially a singular purpose (teacher education) to a multi-service university provides the greatest challenge, and potential contribution, to the project.

While considerable activity had been initiated throughout the nation since July, 1970, there were few examples of efforts by institutions of higher education. Eastern Kentucky University, and other institutions of higher education, could make at least two major contributions to the accomplishment of the goals of career education. The first was to expand and improve opportunities for students to prepare for a wide variety of occupational goals. The second was the preparation of professional educators who would be able to function in situations that place emphasis on career development as an essential part of a total education experience.

In recent years, Eastern Kentucky University had committed itself to the development of programs that will lead toward meaningful employment opportunities after graduation. Many of the programs have been approached from the career ladder concept. That is, departments planned programs which offered a variety of degree options including associate, bachelor, master, and specialist degrees. In most cases, students could enter at the associate degree level and proceed through the specialist degree level with little or no loss of credit. While the greatest growth in number of students had been in the areas of law enforce, nursing, technology, and allied health, opportunities in other traditional disciplines were also developed.

As career education projects have been initiated since July 1, 1970, one of the greatest obstacles encountered was the development of professional educators who are able to function in career development roles. A significant amount of the funds allocated to these projects had been directed at retaining existing school staff or for people who conduct the retraining activities.[3] Other projects were devoted almost entirely to the development of materials[4] for accomplishing inservice strategies.[5] While it was recognized that inservice education must continue, few institutions had accepted the implied challenge and felt content to let local education agencies deal internally with the problem.

Related to the inservice problem was the preparation of professional educators prior to entering educational careers. Without pre-service programs which prepared educators to function in situations that emphasize career development, the expensive job of inservice education could never be substantially reduced.

Related Vocational Education Problems

Students from the Fayette County Schools have access to two kinds of vocational education opportunities. The first is represented by student participation in the post-secondary area vocational school (owned and operated by the State and serving 17 counties) and an area vocational extension center (owned by the local school district, operated by the State, and serving predominately Fayette County School students). Reimbursed programs represent the second kind of vocational education opportunities for students. The reimbursed programs are funded by the State through the local school district and include such programs as home economics, agriculture, distributive education, business and office education, and disadvantaged and handicapped programs.

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[3]J.R. Smith, "A Developmental Program of Occupational Education," Cobb County Board of Education, Cobb County, Georgia, A Part D Vocational Education Project, July 1, 1970 to June 30, 1973.

[4]Marla Peterson, "Occupacs for Hand-On Learning", American Vocational Journal, Vol. 47, No. 1 (1972), 40-1.

[5]Myrtle E. Hunt, "Pinellas County Comprehensive Career Education Project - Final Report", School Board of Pinellas County, Florida, St. Petersburg, Florida, June 30, 1973.

Several problems related to vocational education were identified in the section devoted to "Related Fayette County Problems". In addition, other problems, related to vocational education, needed to be addressed if a comprehensive career development effort was to become available to students.

Examples were:

1. The historic perception of vocational education as being only for students who do not intend to go to college, rendered vocational education unattractive to many students, and parents, who could profit from the experiences.

2. Traditional vocational education delivery systems, including length of course, course of study, utilization of facilities, etc., reduced the potential for meeting variable student needs and emerging occupational opportunities.

3. In many cases, especially when local education agencies and vocational education institutions are autonomous units, articulation and communication problems existed in areas of guidance and program planning.

4. Not necessarily unique to vocational education, but certainly a significant problem identifiable in vocational education programs was the perpetuation of programs after the need and/or opportunities no longer existed.

While the problems listed above do not necessarily prevade vocational education in the Fayette County areas, it was necessary to develop plans that avoid the restrictive effects.

Strategy Problems

As the project was initiated and progressed, several strategy decisions were made which have had, and will have, profound influences on career education in the project institutions. The following items are listed because they heavily influenced the decisions made during the first two years of the project.

1. Establishing demonstration sites in four schools (two elementary schools, one junior high school, and one senior high school) for use as examples and for "trying-out" activities.

2. Implementation of activities which could be utilized in other schools throughout the system.

3. Training of a cadre of leadership staff, who will remain in the school system, to assist with dissemination to other schools during the third year of the project and in subsequent years. This group of leaders included personnel from all areas including principals, subject area coordinators, counselors, teachers, librarians, etc.

4. Preparation of materials which will serve as aid to personnel in other schools when they implement career education. These materials included curriculum guides, activity plans with required resources, community resources guides, etc.

5. Development of a strategy for accomplishment of implementation of career education activities in the 41 non-pilot schools and for continuation of career education beyond the project funding.

GOALS AND OBJECTIVES

The objectives listed below are those identified in the original proposal for the project. They served as the basic foundation for the conduct of the project by the project staff. Process goals described the action which was to take place to accomplish the performance objectives. The performance objectives were stated for the purpose of explaining the situtation which should exist when the project activities are completed.

It was expected that several factors would influence achievement of the objectives throughout the involved institutions. Some teachers, because of the extent of their involvement, previous backgrounds, established academic backgrounds, central leadership, etc., were expected to more actively move toward goal accomplishment than others. Several well established procedures needed to be modified before certain goals could totally be accomplished. Hopefully, because of experience gained through implementation, evaluation, and revision, more effective techniques for accomplishing the goals would evolve within the institutions.

Staff development (Fayette County) objectives.

A. Process objectives:

1) To provide a comprehensive program of in-service education to selected staff members so that they might effectively carry out their particular responsibilities in the implementation of the career education program in the pilot schools.

2) To develop an in-service program model for staff which will be used to implement career education programs in the remaining schools in Fayette County, as well as school systems outside Fayette County.

B. Performance objectives

1) Staff members will be familiar with the total concept of career education and will have an

in-depth understanding of the major project goals at each school program level (awareness, exploration, preparation, guidance, and placement).

2) Administrative and supervisory staff will know their roles and responsibilities relative to planning, implementation and continuation of the program.

3) Counseling and guidance staff will know their roles and responsibilities as they pertain to the new functions and emphases of the guidance and counseling program and how the guidance and counseling effort relates to the instructional efforts.

4) Teachers will possess the state of readiness necessary to begin integration and implementation of programs essential to the eventual attainment of the student performance objectives.

Community Involvement

A. Process objective:

To establish a framework within the school program that will permit extensive utilization of community resources, including personnel, in all facets of the school program.

B. Performance objectives:

1) Key community leaders, representatives of different socio-economic and ethnic groups, parents, and leadership personnel in business and industry will be familiar with the concept of career education and will know the broad goals of career education at each major school level.

2) Numerous personnel in the community including parents, representative of each socio-economic and ethnic group plus representatives of specific occupational families will involve themselves in the school program through service on various career education advisory committees or through other activities supportive of project goals.

3) A significant number of persons representing a variety of specific occupational families will volunteer their services as resource personnel to aid the school staff in the instructional program.

4) Appropriate community agencies and resource personnel will cooperate in the implementation of the school placement service.

5) Business and industrial personnel and organized labor representing specific occupational families plus selected community leaders will cooperatively involve themselves with school personnel in utilizing the community as a training center. This would be similar to the traditional cooperative program approach but would permit much greater diversity of opportunities for training.

Career Awareness

A. Process objective:

To orient the learning activities; reading, writing, computing, etc.; in grades 1-6 with career related experiences based on the developmental levels of the students.

B. Performance objectives:

1) Students will have developed an appreciation for work as means of economic independence and self-satisfaction in their life roles.

2) Students' motivation and achievement related to basic education skills will be improved.

3) Students will have developed an understanding and appreciation of the life roles of family members.

4) Students' level of career awareness will more closely approach their physical and various maturity levels.

5) Students will have developed an understanding and appreciation of the social and economic importance of a number of careers represented in the community.

6) Students' self-perception will become more realistic as they mature and progress through the elementary grades.

7) Students will develop an awareness of the many sources of information in the world of work and of ways to obtain and use this information.

8) Students will develop an awareness that different workers need varying levels of educational preparation for success.

9) Students will learn to know themselves in their immediate environment and begin to identify with workers in the broader environment.

10) Students will gain an understanding of and appreciation for the satisfactions people derive from their work experiences.

11) Students will develop the awareness that there is value in work and that work provides the opportunities for individuals to enhance their own dignity and worth.

Career Exploration

A. Process objective:

To establish a career exploration component in the existing junior high curriculum which will involve the teachers of all subject matter areas and allow the students to explore several career clusters.

B. Performance objectives:

1) Students will begin to develop habits and attitudes which are necessary for successful and continued employment.

2) Students will be capable of planning strategies for the attainment of a variety of career goals within their span of interest.

3) Students will have a practical understanding of the working conditions, employment outlook and preparation needed for a variety of careers within several career clusters.

4) Students will have made tentative career decisions by the time they enter high school with complete awareness of their freedom to revise and change decisions.

5) Students will have developed a level of awareness and self-realization that permits identification of a career goal to which they can realistically aspire.

6) Students who plan to terminate their enrollment in the school program following the ninth grade will have received services and job skills which will enhance their probability of becoming employed.

Career Preparation

A. Process objective:

To provide an instructional program that will prepare all students, for one or more possible roles, to include: (1) immediate employment upon graduation, (2) continued education based on a career goal (e.g. technical training at less than the college level, apprenticeship, college, or adult education), (3) immediate employment prior to graduation (drop-out or stop-out), and (4) concurrent employment and education (part-time student and part-time worker).

B. Product objectives:

1) Students planning to terminate their education after grade 12 will have the necessary background for entry level employment.

2) Students planning to continue their education after high school graduation in order to qualify for a chosen career will have the background necessary, to the extent possible, to successfully enter a technical program, college, or other post-secondary training program.

3) School dropouts will have (1) attained attitudes and work habits which are necessary for successful job performance and (2) will have attained entry level job skills for entrance into a cluster of occupations requiring limited training.

4) Students who have dropped out of the school program and who have a genuine desire to avail themselves of appropriate programs within the school will be eligible and encouraged to re-enter such programs.

5) Students will generally be able to relate all subject content to some career applications.

6) Students will have an opportunity to explore and personally test, within a specific cluster or area, vocational career opportunities.

7) A larger number of students will pursue preparation programs in high school and on the post-high school level (less than college grade).

Guidance and Counseling

A. Process objective:

To integrate a program of guidance and counseling with instructional programs at all grade levels (1-14), that is appropriate to the developmental level of the students and focuses on helping students improve their self-understanding and knowledge of the occupational world.

B. Product objectives:

1) Students will expand their knowledge of themselves, and the self-knowledge will be more consistent with known data.

2) Students will develop a positive attitude toward work and preparation for work.

3) Students will become aware of a wide variety of occupations and career opportunities.

4) Students will be knowledgeable of the educational opportunities which will lead to occupational competencies.

5) Students will be able to articulate the relationship between education and occupational success.

6) There will be a reduction in the drop out rate of students which results from dissatisfaction with schools.

7) Students will be aware of the dynamics of occupational opportunities.

8) Students will understand and be able to use career decision-making techniques with full awareness that changes are continually possible.

Dissemination

A. Process objectives:

1) There will be some staff members in every school in the system who will be acquainted with the project goals and procedures.

2) All of the counselors and administrators in the Fayette County system will be aware of the project efforts.

3) Parents will be able to describe the activities in which their children are engaged and will understand the relationship to future success in the adult world.

4) The ERIC clearinghouse will possess selected project information and materials and will make them available on a national basis.

5) All interested citizens of Kentucky will learn of the career education program in Fayette County through the news media, materials distributed by the project staff, or through personal observations.

Teacher education

A. Process objective:

To incorporate career education concepts and methodology into existing pre-service and in-service teacher training curricula at Eastern Kentucky University.

B. Performance objectives:

1) Participants in the various teacher education programs at Eastern Kentucky University will be able to integrate concepts of career education into their teaching activities.

2) Participants in the educational leadership programs and guidance programs will possess the depth of understanding necessary for the implementation of career education programs in a school system.

Goal Revision

During the first year of the project attempts were made to have teachers design student experiences which would be directed at accomplishing the goals and objectives. After examining the first year's efforts it was obvious that the goals and objectives had not been the primary criteria to use to organize student experiences. During the second year of the project another strategy was used to cause greater emphasis on goal accomplishment. Subject area coordinators (curriculum leaders who are responsible for working directly with teachers), teachers, and project staff developed revised goals for each of the grade levels (elementary school, junior high school, and high school). The revised goals and objectives are shown below. These goals were visibly identified throughout the activities planned by teachers during the 1974-75 project year.

1. Elementary School - Common Goals

   a. Students should become aware of their own interests, needs, abilities, and values.

   b. Students should gain basic communication, computation, and research skills needed to explore career choices.

   c. Students should experience practical examples in which academic skills relate to occupational choices.

   d. Students should become familiar with the values of work, a work-oriented society, and a simple philosophy of the dignity of work.

   e. Students should become aware of the vast number of occupational choices open to them through observations and simulated experiences.

   f. Students should experience satisfaction in learning and acquire the simple manual, academic, and interpersonal skills in the performance of a number of work tasks.

g. Students should gain decision-making skills.

h. Students should learn that the educational needs, training, and experiences required for occupations vary.

i. Students should learn that work satisfaction varies from person to person and job to job.

j. Students should be exposed to all of the career clusters by the end of the sixth grade.

k. Students should learn that there are many occupations within each career cluster.

l. Students should become aware of the influences career choices have on values, civic participation, family responsibilities, income, and recreational time.

m. Students should have the opportunity to observe and interact with those who are performing in occupational settings in all cluster areas.

2. Junior High School - Common Goals

a. Students should become aware of their own interests, needs, abilities and values through intensive observation, simulated and realistic class experiences related to the assigned career cluster.

b. Students should develop skills for locating and utilizing the many sources of information needed to refine career decisions.

c. Students should be able to relate subject content to some occupations within the assigned career cluster.

d. Students should continue to develop basic communicative, computative, and problem-solving skills needed in exploring career choices.

e. Students should be exposed to occupations within clusters that represent a wide range of levels from the unskilled to the professional.

f. Students should compare specific occupational areas within a career cluster in terms of work roles (education or training, working conditions, economic rewards), related life styles, and potential satisfactions and dissatisfactions.

g. Students should explore, through their school and other related experiences, various career clusters, as they relate to the life goals (roles) of becoming a successful participant as a family member, as an economic contributor, as a citizen, and in avocational pursuits.

h. Students should develop a level of self-awareness and self-realization that permits them, at least tentatively, to make discriminating decisions in identifying career goals.

3. High School - Common Goals

a. Students should experience activities that develop attitudes, habits, and skills that are necessary for successful and continued employment.

b. Students should experience class activities related to the career cluster assignments.

c. Students should have opportunities for experiences in special and interdisciplinary courses that will provide the skills development necessary for entry-level employment into occupations within the career clusters.

e. Students should be exposed to occupations within clusters that represent a wide range of levels from the unskilled to the professional.

f. Students should develop the skills for locating and utilizing the many sources of occupational career information.

g. Students should be provided the necessary information and experineces concerning the assigned career clusters so they will know the following:

1) educational and/or training requirement for entry-level employment

2) working conditions

3) economic implications

4) personal characteristics

h. Students should know the effects occupations have upon:

1) leisure time activities

2) aesthetics

3) civic participation

4) family responsibilities

5) ethical, moral, and value alternatives

i. Students should have face-to-face contact with people engaged in occupations/activities within the assigned career clusters and have the opportunity to interact with these persons.

j. Students should have the opportunity to engage in paid and/or unpaid activities in career cluster areas of interest.

k. Students should begin to make decisions concerning tentative career goals and begin to systematically plan a strategy to attain these tentative career goals.

The above goals do not represent all of the goals for which the project is concerned. They were developed as those which classroom teachers could effectively accomplish. Other goals are being dealt with as teachers and other staff become comfortable with the ones stated above or have particular interest and expertise in the other goals.

PROJECT DESCRIPTION AND DESIGN

DESCRIPTION

Project elements were determined by examining the three institutions involved. Activities of other similar projects were also studied. The intent was to plan the project to provide for a systematic delivery of career development experiences within all institutions, build on progress already accomplished, and capitalize on the uniquenesses of each of the institutions. Below is a summary of the elements which were of concern when the proposal was prepared. They continued to be major project themes and heavily influenced the decision making throughout the project.[6]

Cooperative Effort. Three autonomous institutions, the Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region, planned to cooperatively organize and implement activities identified. These institutions were involved because each represented a significant element in a total career education effort in the local region.

Program for all Students. The project was planned to organize opportunities for all students regardless of their vocational aspirations, social economic background, abilities or handicaps. Every effort was made to avoid compartmentalization of students by educational path (eg. college, general, vocational). By encouraging students to make developmental decisions through their school experiences, the educational path was planned to become one of the possible paths for implementing their career goal.

Developmental Program. It was the intent for activities to be available to students at all levels of educational development (K-14 +). Emphasis was placed on the cumulative nature of experiences in career development.

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[6]Eastern Kentucky University, loc. cit. 21-35.

> The new idea of career education versus vocational education recognizes the developmental nature of careers, because it builds in the notion that changes occur as a function of growth and maturity.[7]

Activities in the elementary schools, junior high schools, and high schools placed emphasis on the developmental level of students while recognizing the need to account individual difference among students. The developmental components identified for use as a basis for developing activities were awareness at the elementary school level, explorations at the junior high school level, and preparation at the high school level.

a. Career Awareness. Awareness was the primary thrust of the elementary school portion of the program. Both instructional and guidance inputs characterized the activities organized for the elementary school. The awareness component was planned to capitalize on the interest of students and was concerned with self-awareness as well as environmental (not ecological) awareness. Emphasis was placed on integration of career development experiences with academic activities such as reading, writing, computing, etc. Hoyt, et.al., support the need for career development at the elementary school level or as being fundamental to the subsequent career education experiences.

> At the elementary school level, the prime purpose of career education is to help students become aware of the occupational world helping them to become familiar with the values of a work-oriented society and to incorporate such values into their personal value structures. Vocational skill training, at this level, exists primarily for motivational purposes . . .[8]

Additionally they indicate that efforts in the elementary school might yield substantial gains in later years.

> Present research in the education of young children has shown two facts conclusively: a) If the children are

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[7]Samuel H. Osipow, "Implications for Career Education of Research and Theory on Career Education", A paper presented to the National Conference on Career Education for Professors of Educational Administrators, The Center for Vocational and Technical Education, The Ohio State University, Columbus, May, 1972, 16.

[8]Kenneth B. Hoyt, et.al., Career Education--What It Is and How To Do It. (Salt Lake City, Utah: Olympus Publishing Company, 1972), 3.

taught earlier in life, they learn better and faster than if they are kept in an environment where learning is difficult, and b) Many, if not most, attitudes are learned very early in life, and once learned, are difficult to change.

Career awareness was not the exclusive concern of the elementary school activities. Awareness had been, and continues to be, an educational technique which is closely related to student motivation. In addition, until students have had awareness experiences in the elementary school, students will need to have the awareness experiences related to where they happen to be in the educational process.

b. Career exploration. Because of the developmental nature of students in junior high schools, exploration has traditionally been the focus. In amny cases, however, this has been limited to experiences associated directly with textbooks and within the confines of the school building. This project was concerned with exploration of self as it relates to several occupational clusters.[9] Intensive observation and realistic simulation were utilized to increase motivation and occupational understanding which was not usually found in conventional vicarious activities.

All teachers, including regular classroom teachers (math, science, english, social studies, etc.) and practical and fine arts teachers (art, music, business, industrial arts, home economics, etc.) were involved. Each subject area assumed responsibility for helping students more clearly understand the occupational and other life functions of the knowledge related to the subject matter. The plan was instituted as a major step in the career decision making process and to increase motivation toward the learning.

The 9th grade represented a major transition point in the lives of students. Intensive efforts were made during the 9th grade to ensure that students were prepared to move to the 10th grade. Students had the opportunity to examine curriculum decisions, as well as psychological, sociological, and physical aspects of changing schools between the 9th and 10th grades.

It was expected that there would be wide variation among students with respect to their career decisions until students had the opportunity

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[9]Bruce Reinhart, "A Comprehensive Career Education Model: A Bridge Between School and Work", a paper presented to the Southwide Research Coordinating Council, Clearwater, Florida, May, 1972. pp. 11-13.

for the cumulative experiences of a complete program. While exploratory experiences need to continue into the high school, the need for them should reduce as students have had more preliminary experiences in junior high schools.

c. Career Preparation. Program emphasis in the high schools was directed at experiences which will help students gain the competencies to 1) enter the labor force directly after graduation, 2) continue their education (adult education, vocational/technical education, college, etc.) enter the labor force prior to graduation (dropout or stop-out) and d) engage in concurrent education and work. Major concern was given to providing experiences related to all dimensions of life participation that influences effective economic participation.

Vocational programs, such as business and office education, trade and industrial education, agriculture education, and distributive education have helped students to prepare for entry into the world of work. In many cases, the related practical arts courses (industrial arts, general business, general home economics, etc.) have provided exploratory experiences to help students make more effective career decisions. But, too often the vocational programs represent only a small portion of the occupational opportunities available to students and the demand is usually much greater than the programs can support. These programs, by definition have not been designed for students who want to pursue collegiate preparation after leaving the public school.

Academic programs have generally been organized to develop the knowledge and skill to effectively pursue a college program after graduation. For those who go to college, these programs have had demonstrated success. Unfortunately, few conventional academic and fine arts courses contributed to helping students make career decisions. Emphasis was placed on going to college and not on identifying a purpose for going to college.

Phased elective programming (organizing course content into small units from which students elect units of interest) permitted traditionally academic courses to give emphasis to the economic potential of the subject matter. All academic departments assumed responsibility for dealing with specific occupational clusters or certain portions of clusters. Their responsibility included helping students become aware of careers which utilize the subject matter, provide the opportunity to explore careers which had particular interest, and prepare for immediate entry into the labor force or plan for additional preparation beyond public schools. Vocational program opportunities were expanded through more extensive use of cooperative education in areas other than those which already exist in the schools.

Post-Secondary Programs. Many post-secondary opportunities were available to students in Fayette County. All three of the cooperating agencies contributed to post-secondary education of students. The Fayette County Schools operated an extensive adult education program, Eastern Kentucky University has the largest Associate of Arts offering in Kentucky as well as baccalaureate, master, and specialist degree programs, and the Central Kentucky Vocational Region has a school devoted entirely to post-secondary vocational-technical education. For a comprehensive career education program to be totally effective, extensive communication must exist among these, and other institutions for guidance, counseling, and program development.

Guidance and Counseling. Guidance and counseling had been an integral part of the schools in Fayette County for many years with a system-wide ratio of about 350 students per counselor. The guidance program was modified to include teachers and counselors as a team to deliver guidance services. Expansion of guidance services included development of a system to give emphasis to career decision making, revision of the assessment program to include data which will be available to students, teachers, and parents for more effective decision making; intensive counseling at the transition points, student placement, and follow-up.

Community Involvement. Program effectiveness was largely dependent on how well the schools were able to build cooperative arrangements with the community. Intellectual expertise and physical facilities, not readily available in the schools, but essential to preparation for the world of work, existed in the community. Utilization of community for advisory committees, expanded cooperative vocational education, intensified observation situations, and work-study programs increased opportunities for students.

Teacher Education. The success of career education was dependent on the development of staff who were prepared to perpetuate and improve career development opportunities in the schools. Both inservice and pre-service programs needed to be available to help professional educators. Examination of career education activities in Fayette County provided a means to identify competencies needed by teachers and a location for attempting new approaches. Eastern Kentucky University was responsible for providing both inservice and preservice opportunities for professional educators.

Project Milestones. The project was planned to accomplish specific activities over the three-year funding period. The strategy underlying the plan was to develop a systematic and developmental procedure for the installation of career development experiences in the Fayette County Schools. Steps, or milestones, were established as guides for planning project activities.

The ultimate goal of the project was to provide career development experiences to students. However, all of the activities were directed at working with in-school professional personnel. There were several reasons for developing such a plan. Some of them follow.

1. Wider use of funds. It would be difficult to have much impact on students if project funds were used to support staff to work directly with students. By devoting resources to teacher development, a greater impact can be accomplished.

2. Long-range implementation. Resources were directed at those who would remain in the schools, supported with regular district funds, after project funding ended. Thus, continuation of experiences initiated by project activities will not be dependent on large expenditures for staff beyond the funding period.

3. Greater base of expertise. The knowledge base for development of career education experiences would be quite limited if confined to the staff supported by the project. It was considered that a much greater base of experiences could be provided by utilizing the best expertise in the schools.

4. Support through involvement. Committment to the concept of career development is one of the most difficult obstacles encountered by a project. It was expected that greater commitment could be obtained from school personnel if they were sufficiently involved in the development to assume ownership for the experiences.

5. Development involvement. The plan provided for intensive involvement over a sufficiently long enough period of time to permit developmental internalization.

6. Demonstration. By initiating project activities in a pilot demonstration setting, it was possible to a) concentrate resources with a small enough group to have meaningful results, b) provide examples for other schools, c) yield a cadre of leadership (personnel for use in preparing other personnel, d) provide the opportunity for cumulative evaluation, and e) develop materials that could be used with other teachers.

The milestones used by the project staff were identified with dates extending from July 1, 1973 to June 30, 1976. Because activities had to be continuous to adequately accomplish the goals and conform with times when project staff could have access to teachers, the milestone dates conformed more to significant school dates than to funding dates.

Project staff development was the first project activity beginning on July 1, 1973. None of the project staff, except the project director, had previous involvement with the implementation of career education. This step was essential for the accomplishment of following milestones. A significant amount of time was devoted to helping the staff develop an understanding of career education which was sound enough for them to work effectively with teachers in an inservice setting.

During the time period from September, 1973, through December, the project staff directed their efforts at identifying basic materials, planning initial inservice activities, building relationships in the pilot schools, and conducting initial inservice activities. The major outcome of this milestone was to have been directed at involving a few pilot school teachers to the extent that they could begin to implement some activities during the second semester.

Initial implementation was the expectation of the third milestone during the time period January 1, 1974 through June 1, 1974. While teachers who had been involved in the initial inservice activities were expected to implement activities, they continued involvement in inservice activities during this time period and other teachers were involved.

The summer, June, 1974 to September, 1974, was devoted to the goal refining and revising activities initiated during the second semester. In addition, teachers, who were not previously involved or those who had only minimum previous involvement, were provided with additonal inservice experiences.

The fifth milestone was planned to accomplish full implementation of career development activities in the pilot schools. Beyond the major thrust of the September, 1974 to June, 1975 milestone, the project staff conducted inservice activities to expand participation of teachers (both pilot and non-pilot) and achieve greater involvement of subject area coordinators. In part, these activities were directed at preparing materials and strategies to use with diffusion activities.

The milestone to be accomplished in the summer, 1975, was planned to provide inservice for principals, teachers, and counselors to stimulate implementation activities in other schools in Fayette County. A major strategy shift was to take place at this point in the project. Where project staff had previously assumed responsibility for organizing inservice activities, principals were assigned the responsibility. This was done to secure more leadership from principals. Project staff continued to perform in essentially the same way as before, except that they worked with teachers at the request of principals instead of initiating the contact with teachers.

The final milestone of the project, which was planned to take place during the 1975-76 school year and was planned to accomplish diffusion to other schools. Specific activities included inservice experiences, providing support materials, and planning for continuation of career development experiences beyond June 30, 1976--project termination.

Career development in Fayette County was expected to be a dynamic curriculum thrust. It was expected that there would be continued efforts to improve and expand opportunities for the students. The project would provide the seed activities to stimulate momentum for continued progress. That is, by the end of the project funding, it was expected that career development would be a natural concern of all efforts to improve and/or modify curriculum. It was not an expectation that there will be 100% implementation in 100% of the schools in Fayette County. Likewise, it was not expected that a final career development curriculum plan will be established. A more accurate description of the expectation of the schools was that there would be a substantial number of professional staff who had internalized career education to the point that implementation would continue and become more extensive.

DESIGN

The design for the project was developed to cause career education to become an integral part of each of the three institutions - the Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region. While all three institutions contributed to a comprehensive career education thrust, the central activity was located in the Fayette County Schools. Eastern Kentucky University and the Central Kentucky Vocational Region were accountable for supplemental, but important, services to a corrdinated effort.

Pilot Schools. During the first two years of the project, efforts were to be directed at four (4) pilot schools--two elementary schools, one (1) junior high school, and one (1) high school. Information about the four pilot schools is shown in Table I. The student population in the pilot schools (4,300 students) represents about 12% of the total number of students in the Fayette County Schools (34,000 students).

TABLE I

STATISTICAL DATA ON PILOT SCHOOLS

	Garden Springs	James L. Allen	Beaumont Junior	Lafayette Senior HS
Grades Served	1-6	1-6	7-9	10-12
Number of Students	734	628	1,019	2,020
Percentage of Black Students	11.3%	18.0%	6.3%	13.1%
Percentage of Disadvantaged Students	12.8%	12.4%	9.1%	7.9%
Number of Teachers	34	29	42	83
Number of Counselors	1	0	2	6
Number of Paraprofessionals	0	0	0	1
Percentage of Black Teachers	10%	10%	10%	10%

There were several reasons for utilizing pilot schools to accomplish the initial thrust of the project. Below is a summary of some of the more significant reasons.

1. Resources could be concentrated with a small enough group to have an initial impact but large enough to provide continuation decision-making.

2. The schools represented an attendance area which would permit the examination of the cumulative results of experiences.

3. The pilot schools would provide the opportunity to "try-out" activities prior to diffusion to other schools in Fayette County.

4. The demonstration activities should provide important management data needed to make diffusion decisions.

5. Pilot schools should serve as an example for other schools to simulate.

6. Installation of activities should provide the opportunity to accomplish the training of teachers, coordinators, principals, and counselors. This base of expertise will be required to accomplish diffusion to other schools.

Most of the above generalizations were found to be operationally sound. In a few instances, however, some modifications had to be made and additional considerations were established to more effectively accomplish the project goals. Possibly the greatest concern was with developing activities, procedures, and strategies which would facilitate diffusion to other schools and continuation of career education after project funding. The discussion which follows is intended to explain the major modifications in strategy.

During the first year of the project nearly all of the efforts were devoted to the pilot schools. Following the first year of activities, the decision was made to involve staff from other schools while placing primary emphasis on the pilot schools during the second year of the project. Several findings and local conditions contributed to the decision. Among them are:

1. While each school had certain strengths, there were also weaknesses in each school. By involving staff from other schools it was possible to utilize the most competent personnel to develop activities.

2. Several staff members requested the opportunity to become involved. It was felt that maximum advantage could be gained by immediate involvement rather than delaying them for another year.

3. The school district received an ESEA Title III grant to work on career education in all of the junior high schools. While this did not coincide with thispproject plan, the opportunity permitted the early initiation of project goals.

4. The Fayette County Schools has a central curriculum coordination procedure. The subject area curriculum coordinators expressed the desire to include curriculum change, due to career education, in the curriculum plans. By following this plan, it was necessary to include non-pilot school personnel, but aided in the institutionalization of activities.

5. In anticipation of the diffusion activities of the third year of the project, involvement of personnel from other schools during the second year would reduce the impact by developing a cadre of expertise in the schools and obtaining more visibility for the career education thrust.

Personnel Development. The major emphasis of the project was directed, by design, at the development of personnel. This was done for the purpose of ultimately delivering career development experiences to students. To be specific, the role of the personnel employed with project funds was to work directly with those who had direct contact with students (principals, counselors, and teachers) or those who work with curriculum and staff development (curriculum supervisors and administrators).

Project staff activities during the first year of the project were directed at working with pilot school teachers, counselors, and principals. Subject area coordinators were involved to help them gain expertise for future leadership responsibilities. This procedure was adopted to keep dependence on outside funding at a minimum and thus increase the continuation potential after project funding.

Early in the initiation of second year activities, it became obivious that it would be necessary to more extensively involve the subject area coordinttors in leadership roles. Considerable time was devoted to preparing coordinators to assume responsibility for the installation of career development in Fayette County. Not only did this provide the opportunity to expand the number of staff available to work with school personnel, but it provided for systematic and articulated integration of career education in the curriculum of all subject areas. In addition, the corrdinators increased their commitment to career development.

Toward the end of the second year of the project, principals were involved with project activities to prepare for the third year diffusion activities. Based on previous findings from other similar projects this was considered to be an essential initial step in the diffusion process. This required a change of responsibility for the project staff than they had experienced during the first year. That is, in an effort to gain more commitment from principals, they were charged with the responsibility of installing career education in their schools. The project staff, subject area coordinators, and key school personnel served as resource people to the principals and were responsible for project activities which were pertinent to all schools. In practice, the work responsibilities of the project staff and subject area coordinators remained essentially the same. The primary difference was that project staff and subject area coordinators became involved with school personnel at the request of the principals because they needed assistance in accomplishing their responsibility. It was expected that principals and school personnel would approach the installation of career education more positively because they would have a greater feeling of "ownership" for its initiation.

The third year of the project was totally devoted to 1) diffusion of career development activities to other schools, and 2) preparation for continuation of project activities beyond the project funding. Because it was not feasible to diffuse career education activities to all 37 remaining schools in Fayette County, emphasis was placed on broad diffusion (exposure and introduction) to all schools, with more extensive inservice and implementation to selected schools. Diffusion beyond the exposure level was done on the basis of school staff interest. Staff from the pilot schools and subject area coordinators made significant contributions to the diffusion process during the third year. This was viewed as significant because the same staff will be utilized to complete diffusion and continue project efforts beyond project funding.

RESULTS AND ACCOMPLISHMENTS

The project goals, described earlier in this report, were an attempt to predict the goals and accomplishments when the proposal was prepared. These were largely directed at establishing conditions in which students would make meaningful growth in several areas of career development. Many of the goals were expressed in terms of student outcomes. The third-party evaluation, given in the following section of this report, addresses itself to student outcomes as a result of project efforts.

There were, however, several additional accomplishments of the project which will be presented in this section. While many of these accomplishments are reflected in student outcomes, they also demonstrate the base established for continuation of career education beyond project funding. In addition, it will show some of the results and accomplishments which are not apparent from an examination of the student outcomes.

When developing strategies for conducting the project, it was clear that there would be only minimal impact on students and the results would not lead to continuation if the project staff was assigned the responsibility of working directly with students. It was decided that the project staff would function in roles that would cause those who work with students to implement activities which would yield greater career development experiences for students. Also, the project staff worked with several staff in the Fayette County Schools and at Eastern Kentucky University so that they also could help teachers, counselors, librarians, and other school staff.

Project results and accomplishments, for the purposes of this section of the report can be placed into three (3) major categories. The first is staff development; the second is in the area of support systems, and the third is continuation planning. While the three are not mutually exclusive, each has independent features which should be discussed in order to adequately describe project results and accomplishments.

Staff Development Groups

The greatest efforts of the project staff were directed at staff development. Several strategies and methods were used at different times during the project and the activities were directed

at several groups. This was done because of the nature of the activities proposed for each of the three years of the project and because of conditions which existed at various times throughout the project. The staff development thrust included activities for principals, teachers, counselors, librarians, and other personnel who work directly with students in the schools. Also, considerable efforts were directed at staff from the Central Office of the Fayette County Schools including staff in the Department of Instructional Services, Pupil Personnel Services, and General Administration. Staff development efforts were also provided for several staff at Eastern Kentucky University. Most of the above groups were involved in staff development activities simultaneously, but each group will be described seperately in this report.

1. Teachers. More staff development effort was directed at the teaching staff among the schools than with any of the other groups. Several factors contributed to the decision to place emphasis on staff development for teachers. Among them are:

   A. Teachers had greater daily contact with students than any of the other staff in the schools and thus had a greater chance for bringing about changes in students.

   B. In order to effectively implement the program, it was necessary to have a collective effort of all of the staff in the schools. Because teachers were the largest group of staff in the schools, it was necessary to devote more effort to the teachers than any other groups.

   C. The nature of the content and activities associated with the project required the expertise of teachers.

   D. If continued emphasis was to be placed on career education, it was necessary that teachers have the knowledge, skills, and attitudes to implement the appropriate activities.*

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*The third-party evaluations for the 1974-75 and 1975-76 project years support the need to have teachers involved in inservice activities. The evaluations yielded a direct relationship between student growth and the amount of teacher involvement in inservice activities.

Nearly all of the staff development for teachers was directed at staff in the four (4) pilot schools during the first year of the project (1973-74). The major reason for the emphasis being placed at the pilot schools was because of the project plan which was to establish activities in the four schools. The two major kinds of staff development used during the first year were workshops scheduled during times when schools were not in session and released time inservice activities.**

While most of the staff development activities during the second year of the project (1974-75) were devoted to teachers from the pilot schools, a significant number of teachers were included in staff development. Actually, the proposal called for continuation of work with the pilot schools, but several conditions caused a modification of plans to include other teachers. Among the reasons were:

A. After examining the task of expanding career education to other schools in Fayette County (which was the primary goal of the third year of the project), it was decided that it would be necessary to begin the thrust as early as possible.

B. Several teachers from other schools had been expressing a desire to become involved as early as possible. It was decided that best results could be obtained by involving teachers when they expressed readiness.

C. Certain limitations existed by being restricted to only the teachers in the pilot schools. That is, it was found that the pilot schools had certain areas of strength and leadership, but in other areas, the strength and leadership existed in non-pilot schools. In an effort to make use of the best expertise available among the schools, selected teachers from non-pilot schools were involved in inservice activities.

D. Funds, other than project funds, became available to use for the purpose of implementing career education. More specifically, the funds were used to involve some teachers from all subject areas in all ten (10) junior high schools in inservice activities.

**Specific kinds of inservice activities will be discussed later in this section.

By involving teachers from non-pilot schools in inservice activities during the 1974-75 project year helped to more effectively disseminate information throughout the 43 schools in Fayette County. The inservice activities used during the second year were similar to the first year but the project also used college classes as an inservice activity.

Third year (1975-76) project activities for teachers were directed almost entirely at teachers from non-pilot schools as was planned in the project proposal. Pilot school teachers were involved in special activities requiring experience with implementation of career education and were used as resources people when conducting staff development activities with non-pilot school teachers. The major difference between staff development activities during the third-year (1975-76) and the previous two years was the intensity with which teachers could be involved. Because of the large increase in number of schools involved (4 in 1973-74 to 43 in 1975-76) it was not possible for teachers to be involved at the same level (number of inservice hours) during the third year as they were during the first year. Some different staff development techniques were utilized to reach more teachers within the limits of funds and times when teachers were accessible.

2. Department of Instructional Services (DIS) Staff. The group that received the greatest amount of staff development attention were staff in the Department of Instructional Services. This group is responsible for coordination and implementation of the various curriculum areas in the Fayette County Schools. It was one of the goals of the project to help this group gain the necessary skills to assume leadership roles in the implementation of career education in Fayette County. This was a major strategy of the project to (1) more effectively accomplish activities during the third year of the project (1975-76) and (2) to ensure continuation of career education activities beyond project funding. In effect, each of these people became part of the project staff as the project progressed. During the second and third years of the project, the DIS staff assumed major responsibility for conducting inservice activities with teachers from their area of responsibility.

The involvement of DIS staff added credibility to the implementation of career education because teachers were receiving leadership from people who had established credibility and expertise in the various subject areas. This would not have been possible if project staff would have had to work with teachers from all subject areas. In fact, beyond the orientation level, project staff were of only minimal help to teachers from subject areas other than those in which the staff were prepared.

While it was impossible to document the extent of staff development directed at DIS staff, considerable time was given to this group during the first and second year. There were several sessions planned as staff development, but there were far more situations in which the project staff worked on an individual basis with DIS staff. In almost all circumstances where strategies were determined, DIS staff were involved in the decision making processes.

The involvement of this group, and their growth due to project efforts, could possibly be the most significant accomplishment of the project with respect to preparing for continuation of career education beyond the project funding. Even if no staff were employed by the Fayette County Schools to coordinate the continuation of career education, this group would be able to provide enough leadership to ensure an adequate level of continuation.

3. Principals and Administrative Staff. Earlier projects clearly demonstrated that it was necessary for principals and administrative staff to be committed to career education if implementation was to be successful. This was also a concern of the project staff throughout the conduct of the project. It was also the most difficult task to accomplish because of the limited amount of time which these people were available. Much of the involvement of principals and administrative staff was accomplished on a one-to-one basis or in small group situations. However, there was considerable involvement of principals during teacher inservice activities and during sessions planned specifically for principals and administrative staff.

4. Guidance and Counseling Staff. There were staff development activities for guidance and counseling staff but because of the organization structure in the Fayette County Schools, it was more difficult to work with guidance staff as a group than teachers. There was a person responsible for guidance and counseling but the schedules and activities of the counselors were controlled and directed by the building principals. Because of this it was difficult to develop a unified thrust among the schools. The majority of staff development for guidance staff tools place during staff development activities for teachers. In most cases, principals made the decisions as to how much guidance staff would be involved and the kinds of activities for which they would be responsible.

5. Librarians. Involvement of librarians, while not constituting much project staff effort, yield extremely valuable results. The librarians were involved during teacher inservice activities as well as in activities specifically designed for librarians. It was found that the librarians were not only willing to become involved in staff development activities, but they assumed leadership roles in the schools in areas of material identification and utilization.

Staff Development Activities

Almost as important as those involved, were the kinds of inservice activities used during the project to bring about career education implementation. Several kinds of staff development activities and strategies were used during the three years of the project. Some of the activities were used throughout the project, but others were used to deal with specific situations.

1. Workshops. In the summer and at other times when schools were not in session, workshops were conducted. Workshops were also conducted for staff not restricted by daily school schedules. The primary use of workshops was to work with specific groups, such as total school staffs, all principals, all counselors, for introductory purposes. It was found that workshops, were not suited to dealing with situations in which the goal was to obtain detailed understanding or the accomplishment of products. In addition, it was found that workshops of long duration (more than two days) were not as valuable as shorter workshops or other kinds of inservice activities. In some cases staff time for workshops were supported with project funds and in other situations, the workshops were supported by the Fayette County Schools.

   In terms of reaching various staff development efforts, more staff were involved in workshop-type activities than any other kind of inservice activity. The workshop was used more during the first and third years of the project because of the need to reach large groups with rather general information. It should be noted, however, that a greater amount of project staff time was devoted to other kinds of staff development activities that would yield a higher level of individual involvement.

2. Released-time Inservice. The most extensively used staff development activity was the released-time inservice. More specifically, teachers were released from their classroom activities to work on various project related activities such as overall curriculum planning, development of specific lessons, or planning student activities. Project funds and funds from other sources were used to employ substitutes when necessary.

Because of the intensity of involvement and the emphasis on accomplishing a specific goal, the released-time inservice activities appeared to yield more positive results than workshop activities. Another possible reason for the effectiveness of released-time inservice activities was the potential for working with staff on an almost one-to-one relationship. However, care had to be taken to be sure that the individual accomplishments were consistent with the overall goals established by larger groups. One other advantage of the released-time inservice activity was that it was possible to develop a systematic plan for working with groups so that there would be a time lapse between encounters.

3. College-University Classes. Beginning with the second semester of the first year of the project, college and university level courses were supported by the project. These courses were conducted in the schools immediately after school hours and were cooperatively planned between the instructor of the class and the appropriate project staff. Student tuition was partially supported with project funds.

   It was found that staff who were involved in the classes were very supportive of project activities and it was concluded that this was a very effective inservice activity. In fact, in terms of cost effectiveness, these courses yielded far more than any other kind of inservice used during the three years of the project.

4. System-wide Inservice. During each year, the Fayette County Schools designate certain days to be used for the purpose of inservice of the staff. The school staffs have the responsibility for determining what is to be done on the inservice days. The days were used with increasing frequency as the project progressed and school staffs became aware of the system-wide priority being placed on career education.

   The main use of the system-wide inservice days was to introduce career education to the entire staff of the schools. However, in several cases, the introductory sessions led to follow-up sessions that dealt more directly with specific concerns of the faculty members.

5. Saturday Sessions. Some faculty members did not want to leave their classrooms for released-time inservice. Because of this inservice sessions were conducted on Saturdays. The Saturday inservice sessions were designed to accomplish the same goals as the released-time inservice activities. It should be noted that Saturday sessions were rated as a poor time to conduct inservice activities and would not have been used except for the request of the staff.

6. Unscheduled Inservice. The project staff devoted a significant amount of effort to working with faculty at unscheduled time or periods of short duration. These activities were nearly impossible to document and therefore are not included in the summary of inservice which will follow. In many situations, however, these kinds of activities yielded more positive results than the formal kinds of inservice.

   This kind of inservice was used to meet such goals as helping faculty members clarify questions, introducing new materials to teachers, encouraging faculty, etc. The contacts were made during the teacher's preparation time and after school hours. Sometimes the meetings were arranged while other times the meetings took spontaneously.

Staff Development Summary

A major feature of the third-party evaluation for the third year of the project was to attempt to associate student response on instruments intended to measure their performance due to project activities. Also, the inservice data were used to establish a relationship between teacher activity and the extent of inservice activities. The inservice data presented below include only those activities that could be documented by the project staff. In most cases, the activities included are those for which staff members received compensation or where substitutes were provided for teachers, however, other activities such as school-wide inservice activities were also included. Unscheduled inservice activities, described above, were not included in the summaries given below.

1. Elementary School. Figure I below shows the summary of in-service activities in which elementary school staff were involved during the three years of the project. Thirty (30) elementary schools were reached with inservice activities. Due to the project design, two (2) elementary schools had more staff with excessive involvement than other schools. The two schools were the pilot schools and the project proposal was designed so that project staff efforts would be entirely directed at the two schools during the first and second years of the project. However, during the second year, other schools were involved in project activities. During the three years of the project a total of 602 staff were involved in inservice activities. This represents an excess of ninty percent (90%) of the teachers employed in the elementary schools. Figure II is given to show the intensity of involvement in inservice activities at the elementary school level.

FIGURE I
ELEMENTARY SCHOOLS INSERVICE SUMMARY[a]

Hours of Inservice[b]

Schools	3-11	12-23	24-25	36-47	48-59	60-71	over 27	TOTAL
1	13							13
2	26	1						27
3	17					1	2	20
4	9							9
5	5		2					7
6	12							12
7	3	5		2				10
8	6			1	2			9
9	6			1				7
10	23	13						36
11	21	3	1	4	5			34
12[c]	1	4	3	2	2	1	12	25
13	6	1						7
14				1				1
15[c]	2	5	4	3	4	2	4	24
16	6							6
17	34				1	1		36
18	28			2				30
19	29				1			30
20	12	23		2	5			42
21	30	1	1					32
22	4			1				5
23	38						1	39
24	7							7
25	22	1						23
26	13							13
27	40		1	1	3			45
28	11			1				12
29	5			3	1			9
30	17	4		6	3		2	32
TOTAL	446	61	12	30	27	5	21	602

[a]The information included in this summary represents involvement of staff who were active in the schools during the 1975-76 school year. Several others, who have left the Fayette County Schools or have been assigned to other positions have not been included.

[b]Inservice hours include the number of hours in which staff have been involved in inservice activities from July 1, 1973 to April 30, 1976.

[c]Pilot schools.

FIGURE II

SUMMARY OF ELEMENTARY STAFF WITH INSERVICE OVER TWELVE HOURS

Total staff with 12 or more hours of inservice	156
Total staff with 24 or more hours of inservice	95
Total staff with 36 or more hours of inservice	83
Total staff with 48 or more hours of inservice	53
Total staff with 60 or more hours of inservice	26

As the number of schools involved in inservice activities increased, Figure III shows that the smallest amount of inservice took place during the 1973-74 school year and increased through the 1975-76 school year. It should also be noted that inservice activities were counted only through April 30, 1976 while during the other two years the count was from July 1 through June 30, or two (2) months less.

FIGURE III

SUMMARY OF ELEMENTARY INSERVICE BY PROJECT YEARS

Total hours of inservice during the 1973-74 school year	1,640
Total hours of inservice during the 1974-75 school year	2,565
Total hours of inservice during the 1975-76 school year	4,565
Total hours of inservice from 1973-76	8,770

2. Junior High Schools. Figure IV illustrates the extent of involvement of staff in the junior high schools. All ten (10) junior high schools were involved in inservice activities during the three years of the project. It should be noted that the 469 staff members involved represents in excess of ninty-five percent (95%) of the staff in the ten (10) junior high schools. The school with staff who have had greater involvement was the one pilot school at the junior high school level. Figure V shows the intensity of involvement of junior high school teachers in inservice activities.

FIGURE IV
JUNIOR HIGH SCHOOL INSERVICE SUMMARY[a]

Hours of Inservice[b]

Schools	1-11	12-23	24-35	36-47	48-59	60-71	over 72	TOTAL
1[c]	9	9	4	6	5	3	13	49
2	35	5	2	0	0	0	0	42
3	39	1	4	2	1	0	1	48
4	32	6	1	1	2	1	1	44
5	36	7	0	0	2	0	0	45
6	37	6	0	1	1	0	1	46
7	38	4	0	2	1	1	2	48
8	42	3	0	1	1	1	0	48
9	38	4	3	2	1	0	0	48
10	36	6	2	4	2	1	0	51
TOTAL	342	51	16	19	16	7	18	469

[a]The information included in the summary represents involvement of staff who were active in the schools during the 1975-76 school year. Several others who have left the Fayette County Schools or have been assigned to other positions are not included.

[b]Inservice hours include the number of hours in which staff have been involved in inservice activities from July 1, 1973 to April 30, 1976.

[c]Pilot school.

FIGURE V

SUMMARY OF JUNIOR HIGH STAFF WITH INSERVICE OVER TWELVE HOURS

Total staff with 12 or more hours of inservice	127
Total staff with 24 or more hours of inservice	76
Total staff with 36 or more hours of inservice	60
Total staff with 48 or more hours of inservice	41
Total staff with 60 or more hours of inservice	25

Figure VI illustrates inservice activity at the junior high school level during each of the three project years. During the first year of the project only the pilot school was involved in inservice activities. The heavier involvement in the 1974-75 school year is the result of an additional project (Title III), dealing with career education, in which Fayette County Schools was involved.

FIGURE VI

SUMMARY OF JUNIOR HIGH INSERVICE BY PROJECT YEAR

Total hours of inservice during the 1973-74 school year	1,299
Total hours of inservice during the 1974-75 school year	3,090
Total hours of inservice during the 1975-76 school year	2,944
Total hours of inservice from 1973-76	7,333

3. High Schools. Staff from all four (4) high schools in Fayette County were involved in inservice activities during the three years of the project. Figure VII summarizes the involvement, by school, of staff in inservice activities. The total of 365 staff involved represents involvement in excess of ninty-five percent (95%) of high school staff.

FIGURE VII

HIGH SCHOOL INSERVICE SUMMARY

Hours of Inservice

Schools	1-11	12-23	24-35	36-47	48-59	60-71	over 72	TOTAL
1	61	19	3	2	1	1	2	89
2	74	12	1	2		3	1	93
3	25	21	8	10	3	7	18	92
4	66	11	2	5	4		3	91
TOTAL	226	63	14	19	8	11	24	365

Figure VIII is presented to show the depth of involvement of staff at the high school level. As with elementary school and junior high school staff the largest numbers of staff were involved for less than 24 hours of inservice. This was a result of the project design which called for diffusion to schools beyond the pilot school during the final year of the project. However, the number of students with 36 hours or more of inservice (Figure VIII) indicates that involvement of staff from non-pilot schools took place before the third year of the project. The pilot school is clearly identifiable in Figure VII.

FIGURE VIII

SUMMARY OF HIGH SCHOOL STAFF WITH INSERVICE OVER TWELVE HOURS

Total staff with 12 or more hours of inservice	139
Total staff with 24 or more hours of inservice	76
Total staff with 36 or more hours of inservice	62
Total staff with 48 or more hours of inservice	43
Total staff with 60 or more hours of inservice	35

The level of inservice each year is shown in Figure IX. The pattern, with the smallest amount of inservice during the 1973-74 school year, is similar to that of the elementary and junior high school levels. The difference between the other years was due to the involvement of only the pilot school during the 1973-74 project year with a limited number of staff with which to work. The extent of involvement of the pilot school is further shown in Figure X.

FIGURE IX

SUMMARY OF HIGH SCHOOL INSERVICE BY PROJECT YEAR

Total hours of inservice during the 1973-74 school year	1,681
Total hours of inservice during the 1974-75 school year	2,940
Total hours of inservice during the 1975-76 school year	2,619
Total hours of inservice from 1973 through 1976	7,240

FIGURE X

TOTAL HIGH SCHOOL INSERVICE HOURS BY SCHOOL

School	Hours
1	1,114
2	744
3	4,218
4	1,164
TOTAL	7,240

Materials Development

One of the major goals of the project was the development of materials. There were, however, situations where materials were developed to aid in the accomplishment of project goals. Because material development was not a goal of the project the materials have not been evaluated to determine the transportability to other situations. The materials are discussed in this report to show how they contributed to the accomplishment of project goals.

1. Inservice Strategy. In an effort to more actively involve staff in inservice several individuals and groups prepared materials for the purpose of describing what would be done in the classrooms. This activity was encouraged and supported by the project staff in an effort to have the staff focus on the attainment of specific goals. The plans were developed according to guidelines cooperatively prepared by the school staff and the project staff. When possible, materials were developed to describe the use of both commercial and tested non-commercial materials or the utilization of community resources.

2. Special Use Materials. Occasionally groups identified system-wide needs for which materials were developed. These materials were developed at all levels. An example is a slide series developed for use by junior high school English teachers to introduce the "communication" cluster in the classroom. Another example is the "self-development" package developed for use in all grades in elementary schools. Sample pages of the Self-development Guide are shown in Appendix A. In both of the above examples the materials provided for wide latitude in terms of how teachers used the materials but helped to bring about a unified thrust among schools.

Community Involvement

From the beginning of the project it was recognized that it would be essential to obtain meaningful involvement with the community if the project was to attain maximum success. Community involvement was directed at two main areas. The first was to obtain consultant expertise in areas of program development. The second area of concern was to identify community sources where students could expand their understanding of the world of work. Below are some of the kinds of activities in which the project staff participated with the community.

1. Involvement with Community Groups. Early in the life of the project, the project staff made preliminary contacts with several community groups. Initially, the contacts were made to provide the community with information about the project. This early involvement grew to be more extensive as the project progressed. Groups with which the project was extensively involved were the Greater Lexington Area Chamber of Commerce, Blue Grass Chapter of the Rotary Club, Lexington Junior Leaque, and Associated General Contractors. Kinds of cooperative activities which took place were to identify community resources which students could use for learning experiences, participate as resources to teachers, and provide financial assistance for special kinds of projects which would otherwise not have been possible.

2. Advisory Committee. For the purposes of technical assistance, two kinds of advisory committees were established. The first kind was the small group type to assist with the development of specific curriculum efforts. An example was the committee established, with the assistance of the Chamber of Commerce Education Committee, to help the high school plysical science teachers.

   The second kind of advisory committee was the General Advisory Committee which was organized to help with overall guidance of career education in Fayette County. A copy of the advisory committee is shown in Appendix B. The committee assisted the project with such activities as gaining approval for new vocational education facilities and providing support to the board of education for continuation of career education in Fayette County.

3. Community Resource Guide. An important product of the project, in cooperation with the community, was the "Community Resource Guide". It was the product of the efforts of the Lexington Junior League, Rotary Club, Chamber of Commerce, and the project staff. This was one example of a product for which financial

support was provided by community sources. Teachers had expressed problems with the identification of appropriate individuals as resources and with the time involved in arranging for community resources.

The guide includes in excess of 300 entries of resources which can be used by teachers. In addition the guide has aids for helping teachers organize for guest resource people, field trips, and interviews. Samples of the kinds of entries found in the guide are shown in Appendix C.

Planning for Continuation of Career Education

At the outset of the project, continuation of career education was always one of the criteria which entered into all decision making. Below are some of the kinds of activities which were used to ensure continuation of career education beyond project funding.

1. Staff Development. Possibly the most extensive effort was to develop staff to the extent that there would be a cadre who had internalized career education sufficiently to carry on beyond project funding. The primary effort was directed at leadership staff such as Subject Area Coordinators, Principals, Department Chairpersons, and key teachers. This effort may represent the single greatest accomplishment of the project.

2. Support from Advisory Committee and Community. As mentioned earlier, the support gained from the advisory committee and community groups helped to ensure project continuation. One reason for the impact of these groups was that the relationships were established to support career education as a meaningful part of the curriculum and not the project. The relationships were built to continue beyond the duration of the project.

3. Vocational Education Facilities. During the conduct of the project, two (2) additional vocational schools were planned for future construction. The first received authorization for immediate construction and the second is to follow later. While much of the work for the vocational schools was accomplished by people not directly related to the project, the project and the Career Education Advisory Committee assisted with the activities leading to state and local approval of the schools.

4. Continuation Staffing. The Fayette County Schools have planned to support a staff for the continuation of career education. In addition to the Director of Career and Vocational Education, two (2) additional staff will be employed to work with the schools in Fayette County. It should also be noted that the staff in the

Department of Instructional Services have been prepared to work with the implementation of career education and are committed to seeing that career education is totally installed and continued in the schools.

5. System-wide Implementation Package. During the final half of the third year of the project, a substantial amount of staff time was devoted to preparing for continuation and expansion of career education. To accomplish the task of installing career education in all schools, a planning package was developed for use by the principals in the schools. The planning package is included in Appendix D.

Teacher Education

The project had only limited impact on teacher education at Eastern Kentucky University. However, the involvement of several staff from Eastern Kentucky University has causeed the College of Education to consider career education as a meaningful part of the curriculum for professional educators.

During each of the project years, Eastern Kentucky University supported courses for graduate credit. Staff from various schools at all levels throughout Fayette County participated in the courses. This involvement with staff who were implementing career education helped the staff from Eastern better understand the problems of introducing career education into the schools.

EVALUATION

The following report was prepared by Development Associates, Inc. on the basis of guidelines from the U. S. Office of Education. The results are based on data collected at the project site as outlined and supervised by the investigators from Development Associates. The two main investigators for the evaluation were Mr. Eddie Taylor and Mr. Russell Schuh. For purposes of clarity, the entire report, including appendices, has been presented in this section as it was received from Development Associates, Inc.

FINAL REPORT

EVALUATION OF THE KENTUCKY COOPERATIVE CAREER EDUCATION PROJECT

SCHOOL YEAR 1975-1976

Submitted To:

COOPERATIVE CAREER EDUCATION PROJECT
EASTERN KENTUCKY UNIVERSITY, RICHMOND, KENTUCKY

Submitted By:

DEVELOPMENT ASSOCIATES, INC.
1521 New Hampshire Avenue, N. W.
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September 1976

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TABLE 1

STUDENT SAMPLE BY SCHOOL AND GRADE LEVEL

SCHOOL	NUMBER OF STUDENTS BY GRADE LEVEL			
	3rd	6th	9th	12th
James Allen Elementary	46	48		
Dixie Elementary	45	38		
Ewan Elementary	43	47		
Northern Elementary	35	35		
Yates Elementary	43	40		
Garden Springs Elementary	48	44		
Deep Springs Elementary	47	47		
Beaumont Junior High			39	
Crawford Junior High			29	
Jesse Clark Junior High			36	
Southern Junior High			38	
Bryan Station Senior High				45
Lafayette Senior High				36
Tates Creek Senior High				49
TOTAL	307	299	142	130

I. OVERVIEW

I. OVERVIEW

A. Introduction

This project which involves the Fayette County Schools, Eastern Kentucky University, and the Central Kentucky Vocational Region was developed on the premise that cooperative involvement in career education would improve the individual efforts of the institutions involved. In the summer of 1972, staff from Eastern Kentucky University and the Fayette County Schools developed a proposal to fund a project under Part D of the Vocational Education Act, as amended. The proposal was accepted by the U.S. Office of Education and the project became a second-round exemplary vocational education project with operations beginning in July 1973. The project has now completed the final year of a three-year demonstration effort.

The Fayette County School System, serving the Lexington area, has an enrollment of approximately 35,000 students and operates 31 elementary schools, 10 junior high schools, and 4 high schools. During its first two years the project focused on 4 pilot schools (2 elementary, 1 junior high, 1 high school) out of the system's 45 schools, and then expanded to all of the county schools during its last operational year as a demonstration project. Initially, one control or comparison school was designated for each of the three levels in order to compare and contrast results of the project in the four pilot schools.

The Central Kentucky Vocational Region has participated as a cooperating agency in the project as well. This region, under the administrative authority of the State Department of Education, operates two schools, one secondary and the other a post-secondary vocational school, both of which serve students in the Fayette County School System.

In the proposal to the U.S. Office of Education (USOE) a series of project goals and objectives were postulated. Major areas in which both process and performance objectives were formulated include:

- staff development;
- community involvement;
- career awareness;
- career exploration;
- guidance and counseling; and
- teacher education.

The first year of the project operations revolved around several activities. First, planning and establishing project implementation strategies and introducing career education into the four pilot schools was accomplished with a major emphasis on teacher orientation and training. Additionally, the project staff, cooperating with teachers, assisted in the development of several curriculum guides for all grade levels. Other activities included: initiation of exploratory experiences for students with the Fayette County State Vocational School; development of a plan for a career education advisory committee; and identification and procurement of career development materials to support the professional education development program at Eastern Kentucky University.

For the second operational year, the specific activities that were targeted to be accomplished were to:

- expand and improve activities in the regular classrooms in the pilot schools;
- generate materials to be used in the diffusion process during the 1975-76 project year;
- plan strategy for diffusion of career education in other schools in Fayette County;
- expand and/or plan for expansion of cooperative education experiences available to Fayette County students;
- expand the teacher education capabilities, with respect to helping teachers function in career development roles at Eastern Kentucky University;
- improve the cooperative activities among the Fayette County Schools, Central Kentucky Vocational Region, and Eastern Kentucky University;
- expand the involvement with community resources including individuals, businesses, and organizations;
- expand dissemination of project activities within cooperating institutions and with the community;
- begin some initial diffusion activities with other schools in the Fayette County Schools; and
- clarify the roles and responsibilities of various staff for implementing, expanding, and continuing project activities.

The key activities for the third and final year involved expansion of project activities to all of the county's schools, dissemination of project techniques and processes, and the development of permanent support for project initiated processes from local and state services. In carrying out these activities the project employed a staff of four professionals. The project director, an employee of Eastern Kentucky University, devoted 75 percent of his time to the project. In addition there were three full-time career curriculum specialists: one for the elementary grades (1-6), one for the junior high schools (grades 7-9), and one for the high schools (grades 10-12). The high school career curriculum specialist was responsible for the operation of the project office in Lexington and acted in the absence of the project director. According to interviews, the project staff assumed responsibility for a range of activities such as articulation, dissemination, community involvement, and other elements of the career education program in the county.

The project staff in Lexington worked closely with the Lexington school system's Department of Instructional Services which provides curriculum leadership for the Fayette County Schools. The staff worked with the Department's subject matter coordinators who are basically responsible for supervising curriculum development and working with teachers in the county schools to integrate career development into the curriculum at the various grade levels.

B. This Evaluation

The original project design provided for a three-year longitudinal evaluation effort designed to test participants' involvement in project-supported activities. The first year testing program under this design was carried out as planned. During the second year, the U.S. Office of Education issued a new set of reporting and evaluation requirements for projects funded through Part D funds which representated an attempt to secure consistent data across projects by requesting each one to respond to a set of six evaluation areas. Thus, in order to accommodate those new requirements, it was necessary to change the original evaluation design.

The second-year evaluation design provided for the assessment of student outcomes at grade levels 3, 6, 9, and 12. Using a pre/post comparison evaluation design, standardized instruments were administered to students in order to assess the effectiveness of the project in producing changes in students' self-awareness, career awareness, career decision-making skills,

motivation towards school and their academic skills. In addition, questionnaires were administered to students and teachers in an attempt to determine the extent to which the project's approach resulted in differential treatment. The results of the evaluation were interesting. Students in the pilot schools were generally found to have made larger gains than students in the control schools. The gains, however, were not large enough to reach statistical significance at the .05 level of confidence. On the other hand, teacher responses on a questionnaire concerning project related activities did appear to differentiate between teachers participating in the project and those that were not. Significantly, the differences appeared to be related to the amount of project training the teachers had received. Unfortunately, the evaluation had not been designed to either determine the teacher outcomes resulting from project activities or test the effect of teacher training on student outcomes. Therefore, the evaluation was forced to limit its findings to the observation that the project appeared to produce change in teacher responses to career education questions and appeared to produce self-reported changes in their classroom behavior. These teacher outcomes suggested that there was a relationship between the intensity of training a teacher received and the amount of career education activities infused into the daily classroom curriculum. The evaluation, however, had not been specifically designed to explore the possible relationship between teacher training and the production of student outcomes.

In developing the evaluation design for the third and final year of the demonstration project, DA and the project staff sought to recognize the implications of several changes in the program and to seek a method of exploring the relationship between teacher training and student outcomes while addressing the six study areas required by the USOE.

The final project year differed considerably from the first two years. The most striking difference was the number of schools in which the project operated. The expansion from four pilot schools to the entire Fayette County School System carried with it some important considerations for both program operations and program evaluation. For example, the project budget for inservice training, the size of the staff, and resources available were essentially unchanged from the previous two years. At the time, the project was working with a significantly greater number of teachers. This could only result in less intensive direct project involvement with participating teachers than the previous two years.

The expansion also eliminated the availability of control or comparison schools. During the first two years, non-treatment schools were identifiable and it was possible to identify a group of non-project students with whom project students could be compared. With the expansion, all the county schools became treatment schools and so could not be used for comparison. Also, with the rapid acceptance of career education, it was judged to be impractical to locate control or comparison students from nearby school districts. Because of these considerations, it was decided to attempt to assess differential treatment effects this year. To this end, a rather involved evaluation design was developed which is discussed in the next section.

II. EVALUATION DESIGN AND METHODS

II. EVALUATION DESIGN AND METHODS

The USOE guidelines for evaluating second-round vocational exemplary programs specify the measurement of student outcomes resulting from the project at grade levels 3, 6, 9, and 12. They further indicate that a pre/post comparison evaluation design is preferred which should provide for the administration of a pretreatment and posttreatment test to a sample of students affected by the project and to another sample not affected by the project.

Due to the expansion of the project into all of the Fayette County schools this year, it was not possible to identify a group of students as non-participants. Further, because of the emphasis of career education within the state, especially at teacher training institutions, it was not judged feasible to identify suitable comparison groups in school districts outside of the Fayette County School System. Therefore, it was necessary to develop an alternative evaluation design which might assess the effect of the project upon the students it served. This design was developed, in part, around findings of previous evaluations.

Evaluation results from the previous year revealed that elementary school teachers with a high level of project training clearly had a better understanding of career education concepts than did those with less or no training. They also reported devoting more time to career education within the classroom than did the others. These findings suggested that there was a possible relationship between the level of training involvement of teachers and the level of student outcomes produced. Therefore, DA and the project staff decided upon an evaluation design which would seek to compare the student outcome measures of samples of students of highly involved teachers with those of students with teachers of low training involvement. It was agreed that student outcomes would be measured as the gain on pretest and posttest scores on selected instruments. Based upon these considerations and in part from the results of the previous evaluations, the resulting design was developed and is detailed below by grade level.

A. Elementary Level - Grades 3 and 6

At the elementary level it was expected that teachers participating most in training would demonstrate a greater understanding of career education principles, as outlined by the USOE, than would those with less involvement. The nature of teacher involvement, however, was expected to change from that of previous years. In the past, project resources were focused upon a limited number of schools. The training approach aimed at using project resources to provide release time for teachers to attend training or project sponsored workshops for the development of

curricula materials and guides. It was determined that participating teachers were exposed to project activities on the average of two days during the school year. Those teachers exposed over nine days were considered highly trained and they were found to respond on the instruments differently than other teachers during last year's evaluation study. Because of the project's expansion this year and the greater number of teachers affected, there were not enough resources available to achieve this level of teacher involvement. Instead, the project staff planned to induce each school administrator to devote some discussion on training resources to further project goals in addition to those resources already available through the project. Therefore, participation was expected to be, in part, a function of individual school policy as well as direct contact with the project.
In order to have a basis of comparison, it was decided to identify the schools by their career education experience or commitment. Three categories of elementary schools were identified for purposes of this study: the two original pilot schools, the expansion schools producing the greatest effort this year, and those schools not involved in career education significantly beyond the level provided by the project itself.
Because of their three-year involvement in the project, the pilot schools were considered to be "high involvement schools." The next category, those schools which had a policy of supporting career education activities and training, were expected to rank next in overall training involvement. The remaining schools, of course, were ranked last in expected involvement.

B. Junior High Level - Grade 9

At the junior high level, several considerations resulted in a modification of the overall evaluation plan. Of the ten junior high schools in the district, one was a pilot school and three were expected to actively participate in the expanded project activities. The remaining six were expected to decline participation. It was decided that the interests of career education at the junior high school level could best be served by not making demands upon these six schools this year with the hope that they would become more receptive the following year. Therefore, two categories of junior high schools were identified for this study: the pilot school with three-year project involvement and the newly participating schools. The remaining schools were excluded from the study. The design provided for the random selection of forty-five students from each school to be included in the study.

C. Senior High School Level - Grade 12

The identification of students of more highly trained teachers at the senior high school level presented a difficult design problem. At that level, each student could have up to six different teachers at a given time and a total of up to 12 for the school year. It was conceivable that a given student could have 3 highly involved teachers and 3 that had no project involvement at all. Therefore, student outcomes were expected to be more a function of how many highly involved participating teachers each student had during the year. The evaluation plan, then, provided for the identification of the teachers of each student. Each teacher was assigned a value based upon the total amount of project training they received during the three-year demonstration period. The total of these values that each student reported was then used as an indication of the overall level of training used to produce the observed gains in each student. For example, a student whose sum of ascribed teacher values was 300 would be ranked higher than one whose total was 100. The assumption was that the higher the total teacher values the higher the project involvement and therefore the greater the level of measured student outcomes.

D. Other Design Considerations

In addition to the required student outcome measures, the evaluation plan provided for an assessment of changes in the school principal's understanding of career education as a result of the expanded project activities. Using a questionnaire developed around career education principles contained in the USOE Policy Paper "An introduction to Career Education" by Dr. Kenneth B. Hoyt, principals were assessed to determine the extent to which they were in agreement with USOE concerning the nature of career education. It was presumed that they might also change their position based upon the project's efforts this year. Therefore, the questionnaire was administered on a pre and post basis.

A similar questionnaire was also administered to participating teachers in an attempt to determine the extent to which there were differences between highly trained teachers and those with less project related training involvement.

Instrumentation

In addition to the questionnaires developed for teachers, student teachers, and principals discussed above, three standardized instruments were used in the measurement of student outcomes. These instruments, in compliance with USOE guidelines, were selected from among the list of instruments reviewed by a USOE review panel and deemed accpetable. The instruments

selected included the Coopersmith Self-Esteem Inventory; the Minnesota Affective Assessment Questionnaire and three scales of the Career Maturity Inventory: "Knowing Yourself; Knowing about Jobs; and Choosing a Job." The Coopersmith and Minnesota Questionnaire were administered to the sample of third and sixth grade students. The CMI scales were administered to the samples of 9th and 12th grade students.

USOE Evaluation Questions

In accordance with USOE guidelines, six study questions were to be addressed by this evaluation. Some of these questions were supplemented or modified, as necessary, to permit the analyses appropriate for the project. The USOE questions and the operationalized supplements are presented below.

Question 1: Have students who have participated in the project demonstrated an increase in self-awareness in grade levels 3, 6, 9, and 12?

While pre and post test data were available with which to measure gains in self-awareness, it was felt that this outcome area would be affected more by the level of project related training the students teachers received than by other factors. Therefore, the question was restated and two other questions were posed.

Question 1A: Did students in those elementary schools identified as more intensively involved in the project demonstrate a greater increase in self-awareness than students from less involved schools?

Question 1B: Did seniors with higher-teacher training indices demonstrate a greater increase in self-awareness than students with lower indices.

As indicators of self-awareness, the Coopersmith Self-Esteem Inventory was used at the elementary level and Part I (Knowing yourself) of the Career Maturity Inventory was used at the 9th and 12th grade levels.

Question 2: Have students who have participated in the project demonstrated an increased awareness of and knowledge about work at grade levels 3, 6, 9, and 12?

As with question 1, this question was divided into two questions intended to relate the amount of teacher training and project involvement to the production of student outcomes.

Question 2A: Do students in more intensively involved elementary schools demonstrate a greater increase of and knowledge about work than students in less involved schools?

Question 2B: Do seniors with higher teacher-training indices demonstrate a greater increase of and knowledge about work than students with lower indices.

As the indicators of this variable, awareness of and knowledge about work, the following instruments were utilized:

3rd Grade: Minnesota Affective Assessment Questionnaire for Career Education (MAAQ), Grades 1-3, by Karin Nelson *

6th Grade: Minnesota Affective Assessment of Career Education (MAAQ), grades 4-6, by Kathy Greenwood *

9th and 12th: Part II of the Career Maturity Inventory (Knowing About Jobs).

Question 3: Have students who have participated in the project demonstrated increased competency in career decision skills at grade levels 9 and 12?

This question was restated for this study as follows:

Question 3A: Have 12th grade students with higher teacher training indices demonstrated greater competency in career decision making skills than those with lower indices?

The instrument used for measuring competency in career decision-making was Part III of the Career Maturity Inventory (Choosing a Job).

Question 4: To what extent have participating students been placed in paid occupations, in further education, or in unpaid work that was consistent with their then current career choice at all grade levels by school year?

Since placement was not a specific project thrust, it was not possible to address this question as originally stated; information was not available on the current activities of former students and on their career preferences at the time they left school. For these reasons, it was agreed that the

* Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota.

question would be narrowed down to one which could be answered by the responses of high school teachers concerning the nature of teacher's responsibilities concerning job placement activity. The reformulated question was as follows:

Question 4A: To what extent do teachers consider placing students on jobs as a part of their responsibility?

Data for answering this question was collected from teachers as responses to the teacher questionnaire.

Question 5: To what extent has the project expanded job preparation activities (including work experience and cooperative education) in grades 10-12?

The previous year's evaluation determined that this was not a project priority and was not addressed by the staff. This is as also true for this year.

Question 6: How were the financial resources from Section 142 (c) of Part D of P. L. 90-576 expended at grade levels K-3, 4-6, 7-9, and 10-12, for the first three quarters of the 1975-76 school year?

This question differs from the original only in its restriction to three quarters of the year instead of the entire school year. This was necessary because information on last quarter's expenditures would not be available until after the evaluation study was completed. The data were obtained from project staff using forms developed for this type of fiscal analysis.

Student Sample

In measuring student outcomes, a sample of students totalling 878 was randomly selected from 14 schools within the district. The table on the following page indicates the number of students included in the sample by grade level.

III. FINDINGS AND ANALYSIS

III. FINDINGS AND ANALYSIS

This section contains the results of the data collection and analysis activities of the evaluation and is organized into five main sections:

- Results of the Student Testing - 12th, 9th, 6th, and 3rd Grades;
- Results of the Teachers' Survey;
- Results of the Principals' Survey;
- Results of Preservice Training Questionnaire - Eastern Kentucky University; and
- Financial Resources and Expenditures.

A. Results of the Student Testing - 12th - 3rd Grades

1. High School Level Student Data

At the high school level, 12th grade students were tested in an attempt to measure the degree to which student outcomes resulted from project activities. Students were randomly selected for inclusion in the sample from three high schools: Lafayette, Bryan Station, and Tates Creek. The pretest was administered to a total of 235 students. Of this total, 131 were available for the posttest. The final sample was composed of 37 students from Lafayette High School, 45 from Bryan Station, and 49 from Tates Creek.

The standardized instrument employed was the Career Maturity Inventory of which three scales were used: "Knowing Yourself, Knowing About Jobs, and Choosing a Job." The test results were analyzed using analysis of covariance to determine if statistically significant differences could be found between the three schools. Prior to that, an analysis of the pretest scores was performed to determine if the students not available for the posttest differed significantly from the students available from both test administrations. It was possible, for example, for students not doing well in school to have accounted for most of the loss in the sample. This could have the effect of leaving the better achieving students available for the posttest thereby creating artifically high gains.

The pretest scores were analyzed by applying a t-test to the results. No significant differences were found between the group of students taking only the pretest and the sample taking both tests on the pretest scores. Having made this determination, the pre/posttest results were analyzed and the results are presented in Table 2.

As can be seen the three schools were not found to differ significantly on the first scale "Knowing Yourself." However, significant differences were found in the remaining two scales. It was found that students at both Bryan Station and Tates Creek scored significantly higher than students at Lafayette on the second scale "Knowing About Jobs."

TABLE 2

ANALYSIS OF COVARIANCE
SUMMARY TABLES FOR 12th GRADE STUDENT SCORES ON THE CMI

	Knowing Yourself				Knowing About Jobs				Choosing a Job			
Source	Sum of Squares	df	Mean Square	F	Sum of Squares	df	Mean Square	F	Sum of Squares	df	Mean Square	F
TREATMENT	22.88	2	11.14	1.23	97.18	2	48.59	5.36*	61.66	2	30.83	3.77**
ERROR	968.64	107	9.05		968.35	107	9.05		875.04	107	8.18	
TOTAL	990.92	109			1,065.53	109			936.70	109		

* Significant at the .01 level with Bryan Station greater than Lafayette and with Tates Creek greater than Lafayette.

** Significant at the .05 level with Bryan Station greater than Lafayette.

Bryan Station students also scored significantly higher than Lafayette students on the third scale "Choosing a Job." It was expected that Lafayette students would make higher gains than the students at the other schools because it was a pilot school and had been involved in the project three years instead of two. Therefore, these results were initially surprising. Because an explanation was not immediately apparent, considerable effort was expended in analyzing other variables for insight useful in understanding these results.

The study design provided for categorizing students by the amount of training that their teacher had received. This was done in an attempt to determine the extent to which training affected student outcomes. To accomplish this, each teacher was assigned a weight based upon the number of hours of project-related training received over the three-year term of the project. The students were asked to identify their teachers on a questionnaire. The teachers' values were then averaged to produce an index of teacher training level for each student. Presumably, students with higher indices were exposed to teachers with more extensive project training. The expectation, of course, was that those students with higher indices would make greater gains than those with lower gains. It was further anticipated that this system would permit an analysis of the student outcomes associated with teachers involved over the three years of the project when compared to the outcomes of first-year teachers. It was found that the system was weighted so that in reality the resulting comparisons were between some of the pilot school students and some of the first-year school students. In other words, the "high" indices were limited to the pilot schools.

The first step in this analysis was to compare the scores of those students with highest indices to those of students with the lowest indices. It was determined that 16 students had low indices (i. e., more than one standard deviation below the mean) and 18 had high indices. Table 3 provides a summary comparison of these two groups. As can be seen, the students with the high indices scored significantly higher than those with low indices on only one of the three scales, "Knowing Yourself."

TABLE 3

SUMMARY OF COMPARISON OF THE SCORES OF STUDENTS WITH HIGH TEACHER TRAINING INDICES TO THOSE WITH LOW INDICES AT THE 12TH GRADE LEVEL

	Knowing Yourself		Knowing About Jobs		Choosing a Job	
	High	Low	High	Low	High	Low
Number	18	16	18	16	18	16
Mean	15.33	13.25	16.22	16.06	14.44	13.13
Variance	3.88	12.60	20.42	18.60	18.50	13.32
t	2.06*		.10		.92	

* Significant at .05 Level

While these findings support the expectation that students with high indices will show greater gains than students with low indices, they are not particularly valuable in explaining the overall differences observed between the three schools. Further, analysis of high school student outcome data proved to be of little value. Therefore, the study focused upon process data for insight concerning the high school findings. The analysis of process variables is discussed in the sections which follow.

2. Junior High School Level Student Data

At the junior high school level, 9th grade students were sampled and tested following the same procedures employed for the 12th grade sample. A total of 166 9th grade students were administered the pretest in September; from these, 143 students were drawn from 4 schools, available for the posttest. The selection was random and the final sample included 40 students from Beaumont, a pilot school, the first two project years; 38 students from Southern; 36 from Jessie Clark, and 29 from Crawford. The scores of the students tested were analyzed employing analysis of covariance methods. Table 4 summarizes that analysis for each of the three scales and reveals that statistically significant differences were found on two of the three scales. On "Knowing About Jobs," both Jessie Clark and Southern students were found to have scored significantly higher than those from Beaumont and Crawford. On the third scale, "Choosing a Job," several differences were found. Jessie Clark and Southern were both significantly greater than Beaumont or Crawford. No significant differences between Jessie Clark and Southern were found. However, there was a difference between Beaumont and Crawford with Beaumont scoring higher.

TABLE 4

ANALYSIS OF COVARIANCE

SUMMARY TABLE FOR 10TH GRADE SCORES ON CMI

	KNOWING YOURSELF				KNOWING ABOUT JOBS				CHOOSING A JOB			
Source	Sum of Squares	df	Mean Square	F	Sum of Squares	df	Mean Square	F	Sum of Squares	df	Mean Square	F
TREATMENT	15.50	3	5.17	.72	61.50	3	20.50	4.88*	58.06	3	19.35	3.91**
ERROR	801.17	111	7.72		465.51	111	4.19		549.77	111	4.95	
TOTAL	816.67	114			527.01	114				114		

* Significant at the .01 level with both Southern and Jessie Clark greater than Beaumont and Crawford.

** Significant at the .05 level with Jessie Clark greater than Beaumont and Crawford; Southern greater than Beaumont and Crawford; Beaumont greater than Crawford.

These findings are much like those at the high school level. The pilot school, Beaumont, was expected to produce greater gains than the remaining schools and failed to do so, and the two first-year schools produced significantly greater gains on two of the three scales than the pilot school.

An analysis was performed to determine if the students of teachers with the most project related training performed differently than those of teachers with less training. Within the schools, there was no significant difference between the "high" students and the "low" students. The overall average number of teacher training hours for teachers at the Beaumont was high (64 hours) while at the remaining schools it was low -- an average of 14 hours. This reflects the three-year involvement of Beaumont as a pilot school and the newness of the remaining schools to the program. At Beaumont, the sample apparently did not have sufficient range to permit a meaningful comparison between high and low training effects. Similarily, at the new schools the averages were low with not enough range to permit identification of a high group for comparison.

3. Elementary School Level Student Data

Students were sampled and tested at 7 elementary schools. Two of the schools were the original pilot schools and so have been involved in the project for the past two years while the remaining schools were experiencing their first year of direct involvement with the project.

Students were sampled at two grades, the 6th and the 3rd, in accordance with USOE guidelines. A total of 510 elementary school students were included in the final sample from both grades. Table 5 identifies the elementary sample tested by school and grade level.

TABLE 5

NUMBER OF STUDENTS INCLUDED IN THE ELEMENTARY SCHOOL SAMPLE

	NUMBER OF STUDENTS	
	6th Grade	3rd Grade
James Lane Allen	42	38
Garden Springs	38	39
Deep Springs	40	39
Yates	31	33
Northern	36	32
Ewan	37	37
Dixie	30	38
Sub-totals	254	256
TOTALS	510	

The instrumentation for the elementary students differed from that used at the 9th and 12th grade levels. The Minnesota Affective Assessment Questionnaire for Career Education was employed to measure student outcomes with respect to knowledge of the world of work and the Coopersmith Self-Esteem Inventory was employed to measure student outcome with respect to improved self-esteem. At the 6th grade level the analysis of the test results for both the Coopersmith and the MACQ failed to find any statistically significant differences between the seven schools. Unfortunately, it was also learned that, due to administrative and logistical problems, it was not possible to relate the elementary students tested to their teachers. This meant that at the elementary level it was not possible to compare the test results of students based upon the amount of training of their teachers.

The 3rd grade results were more interesting than those of the 6th grade. It was found that one pilot school, James Lane Allen, received significantly higher scores than the remaining six schools on the Coopersmith. It was also found that one of the first year schools, Ewan, scored significantly lower than the other six schools. Because of the larger involvement of the pilot schools with the project, this result was not unexpected.

In summary, Table 6 below presents the overall analysis for the 7 elementary schools.

TABLE 6

ANALYSIS OF COVARIANCE

SUMMARY TABLE FOR COOPERSMITH 3RD GRADE

Source	df	Sum of Squares	Mean Square	F
TREATMENT	6	3,621.49	603.58	15.84
ERROR	248	9,445.42	38.09	
TOTAL	254	13,066.91		

TABLE 7

AVERAGE NUMBER OF TEACHER TRAINING HOURS BY SCHOOL
FOR THREE-YEAR TERM OF PROJECT

SCHOOL	AVERAGE HOURS	SCHOOL	AVERAGE HOURS
Lafayette High School*	40.6	James Lane Allen Elementary*	35.1
Bryan Station H.S.	12.4	Garden Springs Elementary*	72.1
Tates Creek H.S.	12.8	Yates Elementary	20.3
Overall High School	22.1	Northern Elementary	7.9
Beaumont Junior High*	54.8	Ewan Elementary	5.6
Southern Junior High	8.3	Dixie Elementary	14.6
Crawford Junior High	10.6	Deep Springs Elementary	9.8
Jessie Clark Junior High	12.2	Overall Elementary	21.5
Overall Junior High	21.6		

* Pilot Schools

The table reveals that the overall average number of training hours did not vary much between the elementary, junior high,and high school levels. There was a noteworthy range between the pilot schools and the expansion schools. The range of the latter schools is indicative, in part, of the overall commitment of the individual schools to the project's objectives. The schools with the high averages are the ones that devoted more of their overall discretionary training time to career education.

In total, over 600 teacher questionnaires were distributed at all three levels with 283 being completed and returned by the time data analysis was started. This represents a return rate of just over 41 percent. No attempt was made to followup in non-respondents owing to the lateness of the study in the school year. The data analysis did not actually begin until after the senior high schools had completed their term. The response rate was similar at all three levels.

2. Teacher Questionnaire Results

Teachers were asked to indicate their agreement or disagreement with nine questions relating to career education tasks for teachers. Agreement that the indicated tasks were appropriate for classroom teachers was taken to indicate understanding of career education concepts. Each question was developed from the statement of career education tasks for teachers contained in the USOE Policy Paper "An Introduction to Career Education " by Dr. Kenneth B. Hoyt. The results of the teacher responses are presented in the tables which follow. As can be seen, the teachers at Lafayette were generally more in agreement with the first five statements than the teachers at the two first-year schools. Thereafter, the responses varied between the three schools. It is noteworthy that in each school, there was less agreement that teacher training had prepared them to implement the activity than there was that the activity was appropriate for classroom teachers.

TABLE 8

PERCENT OF HIGH SCHOOL LEVEL RESPONDENTS WHO AGREE THE FOLLOWING ACTIVITIES ARE THE CLASSROOM TEACHER'S RESPON - SIBILITY AND WHO AGREE THAT THEIR TRAINING HAS PREPARED THEM FOR THAT TASK

Activity	Lafayette		Bryan Station		Tates Creek	
	% Agree*	% Trained	Agree	Trained	Agree	Trained
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	65	65	57	57	49	44
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.	97	71	89	59	79	56
c. Help pupils acquire and utilize good work habits	97	82	95	76	79	67
d. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.	91	79	65	68	69	46
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	71	56	68	41	56	36
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society.	56	50	73	51	51	31
g. Help students acquire job-seeking and job-getting skills	65	56	86	49	54	49
h. Participate in the job placement process.	32	26	43	22	33	18
i. Help students acquire decision-making skills.	94	88	95	78	77	64
	n=34		n=37		n=39	

* Each teacher was asked "in your opinion, should it be the responsibility of the classroom teacher to?" The responses to that series of questions appear under "% Agree." Next each teachers was asked "Has your training prepared you to?" The results of the responses to this series appear under trained.

High school teachers tended to disagree with the USOE policy paper on the issue of whether teachers should participate in the job placement process. They were also split concerning their agreement that teachers should provide students with specific entry level vocational competencies. It is also noteworthy, but not surprising, that a larger percentage of the pilot school teachers felt that their training had been adequate than did the first-year school teachers.

At the junior high school level, the results did not reveal a clear pattern which differentiated the pilot school responses concerning the appropriateness of activities from those of the other schools. As Table 9 reveals, the junior high school teachers at Crawford were generally in less agreement with the statements than those at the other three schools. The responses from the remaining three schools were essentially similar. In responding to the questions, relative to the adequacy of training, there were some response patterns that appear to differentiate Beaumont from the other schools.

TABLE 9

PERCENT OF JUNIOR HIGH SCHOOL LEVEL RESPONDENTS WHO AGREE THE FOLLOWING ACTIVITIES ARE THE CLASSROOM TEACHER'S RESPONSIBILITY AND WHO AGREE THAT THEIR TRAINING HAS PREPARED THEM FOR THAT TASK

Activity	Beaumont		Southern		Crawford		Jessie Clark	
	%Agree*	%Trained	%Agree	%Trained	%Agree	%Trained	%Agree	%Trained
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	55	50	55	41	45	36	60	30
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.	86	55	91	55	73	41	90	50
c. Help pupils acquire and utilize good work habits.	100	64	100	86	77	50	100	90
d. Help pupils develop, clarify and assimilate personally meaningful sets of work values.	95	68	91	59	68	59	90	30
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	64	41	59	27	18	14	50	10
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society.	55	36	50	18	18	14	60	40
g. Help students acquire job-seeking and job-getting skills.	68	31	73	53	45	18	70	30
h. Participate in the job-placement process.	32	5	18	18	18	9	0	70
i. Help students acquire decision-making skills.	91	59	86	73	73	64	100	70
	N=22		N=22		N=22		N=10	

*Each teacher was asked "In your opinion, should it be the responsibility of the classroom teacher to..." The responses to that series of questions appear under "% Agree." Next each teacher was asked "has your training prepared you to..." The results of the responses to this series appear under trained.

For example, more Beaumont teachers felt that their training had prepared them to integrate career education concepts into their regular classroom activities than those of the first-year schools. A similar pattern is found in their responses concerning the adequacy of their training to provide specific vocational competence to students (Jessie Clark being the exception to the pattern).

Most noteworthy, however, are the combined responses to the item concerning participation in the job placement process. A higher percentage of pilot school teachers agreed that it should be a teacher's responsibility to participate in the process than those of the first-year schools. Conversely, a much lower percentage, felt that they had been adequately trained to fulfill that responsibility. Greater training would appear to produce the dual reaction of greater agreement that teachers should participate in the placement process and less agreement that they were prepared or trained to do so.

Table 10 presents the information for the seven elementary schools. It can be seen that the two pilot schools appear to be generally in somewhat less agreement with the first three questions than the first-year schools. This might represent the wisdom of experience or the enthusiasm of newness or both. However, no clear pattern is apparent which distinguishes the pilot schools from the expansion schools.

For both sets of questions the teacher responses for each grade level grouping were compared. That comparison is presented on Table 11 with some interesting and noteworthy results. For example, a greater precentage of elementary school teachers agreed that teachers should help pupils acquire and use good work habits than either junior high or senior high teachers with the latter being the lowest. The same pattern can be observed on the question of helping students to develop work values.

TABLE 10

PERCENT OF ELEMENTARY SCHOOL LEVEL RESPONDENTS WHO AGREE THE FOLLOWING ACTIVITIES ARE THE CLASSROOM TEACHER'S RESPONSIBILITY AND WHO AGREE THAT THEIR TRAINING HAS PREPARED THEM FOR THAT TASK

ACTIVITY	James Lane Allen		Garden Springs		Yates		Northern		Deep Springs		Dixie		Ewan	
	%agree	%trained	%agree	%trained	%agree	%trained	%agree	%trained	%agree	%trained	%agree	%trained	%agree	%trained
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	60	60	68	55	56	44	69	38	56	44	40	50	65	24
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.	80	70	91	73	89	44	85	62	94	31	100	80	100	53
c. Help pupils acquire and utilize good work habits.	90	90	95	73	100	78	100	92	100	88	100	70	100	88
d. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.	80	80	82	64	89	67	100	92	94	69	90	80	94	65
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	60	40	32	45	44	22	38	31	69	13	90	70	76	29
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society.	50	10	45	32	33	22	46	15	38	13	60	30	47	18
g. Help students acquire job-seeking and job-getting skills.	40	30	50	27	78	0	38	15	56	25	60	10	71	24
h. Participate in the job-placement process.	10	10	27	14	11	0	15	8	25	6	40	20	18	18
i. Help students acquire decision-making skills.	90	70	95	86	89	44	92	46	88	88	100	70	88	82
	N=10		N=22		N=9		N=13		N=16		N=10		N=17	

TABLE 11

PERCENT OF THE TEACHER RESPONSES AT THE ELEMENTARY, JUNIOR HIGH, AND HIGH SCHOOL LEVEL WHICH AGREE THAT (A) THE FOLLOWING ACTIVITIES ARE TEACHER RESPONSIBILITIES AND (B) THAT THEY HAVE BEEN TRAINED TO FULFILL THAT RESPONSIBILITY

Activity	Elementary		Junior High		Senior High	
	% Agree	%Trained	%Agree	% Trained	%Agree	%Trained
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	61	44	53	41	62	55
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.	92	59	84	50	88	62
c. Help pupils acquire and utilize good work habits.	98	82	93	70	90	75
d. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.	90	72	85	58	75	64
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	57	35	47	25	65	44
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society.	45	21	43	25	60	44
g. Help students acquire job-seeking and job-getting skills	36	21	63	34	68	49
h. Participate in the job-placement process.	22	11	20	12	36	22
i. Help students acquire decision-making skills.	92 N=97	73	85 N=76	66	88 N=110	78

A majority of the elementary and high school teachers felt it was the teachers' responsibility to integrate career education concepts into their regular activities. a majority of the junior high teachers agreed. A majority of the high school teachers, however, felt that teachers should provide specific vocational competencies to students while at the junior high and elementary school levels the majority disagreed. A majority at all three levels felt that it was not the teachers' role to participate in the job placement process. A greater percentage of the high school teachers felt it was the teachers' responsibility than at the other two levels.

In comparing the responses with respect to the adequacy of training the high school teachers clearly indicate more satisfaction than the other two levels. They are followed by the elementary school teachers and then the junior high. With respect to all questions, more teachers agreed that activities were appropriately teacher responsibilities, than agreed that their training had prepared them to fulfill that responsibility.

3. Teacher Reported Career Education Activities

In addition to surveying teachers concerning principles of career education, an attempt was made to have them report career education activities. Teachers were asked to report their activities on a monthly basis with the hope that the reporting would be more accurate than if reported over longer periods and would not become too burdensome to the teachers. They were asked to report the number of people visiting their classroom as part of a career education activity, the number of large and small group field trips taken during the month, the number of career education audiovisual materials used, and the number of printed and teacher made career education materials used during the month. While the limitations of such a self-reporting system were appreciated, it was expected that these procedures might provide some insight concerning the nature of the teacher activities resulting from the project. Table 12 presents the activities reported by the teachers for the first three quarters of the school year.

TABLE 12

NUMBER OF CAREER EDUCATION ACTIVITIES REPORTED BY TEACHERS BY SCHOOL

School	People in Class	Large & Small Group Field Trips,	CE Audio-Visual Materials,	Printed CE Materials	Teacher Made CE Materials
Lafayette High*	190	113	390	309	672
Bryan Station High	169	160	454	515	569
Tates Creek High	185	144	336	371	251
Beaumont Junior High*	72	9	234	149	291
Crawford Junior High	136	39	309	258	343
Jessie Clark Jr. High	29	10	104	47	107
Southern Junior High	30	5	136	116	163
James Lane Allen Elementary*	636	31	65	62	65
Garden Springs Elementary*	283	37	430	378	681
Deep Springs Elementary	43	48	214	99	193
Junia Evan Elementary	71	39	121	29	30
Northern Elementary	73	51	311	164	293
Yates Elementary	62	66	163	69	58
Dixie Elementary	48	27	44	73	39

* Pilot Schools

The table reveals that, in general, high school teachers reported a higher level of project related activities than either the elementary and junior high school levels. At that level, the pilot school did not report a level of activity that clearly differentiated it from the first-year schools. The same pattern holds true for the junior high school level as well where one first-year school consistently reported a higher level of activity than the pilot school.

At the elementary level, one of the pilot schools, Garden Springs, reported a higher overall level of activity than the other schools. The other pilot school reported the highest level of using resource people in the classroom of any school at all three levels. At the elementary level, the use of resource people in the classroom appears to set the pilot schools apart from the first-year schools. No other clear pattern emerges at this level.

The next step in the analysis was to compare the level of reported activites to the student outcome measures. At the high school level, the comparison was insightful. Bryan Station reported the highest overall level of activity being highest in the use of field trips, the use of audio visual career education material, and presentation of career education materials; second was the use of teacher made career education reported materials. This school was also found to have achieved significantly higher student scores on two of the three scales of the C. M. I. Therefore, it would appear at this level that there is a correlation between the level of activities undertaken (reported) by teachers and the production of student outcomes.

At the junior high school level, this pattern is reversed. The two schools reporting the highest level of activities, Beaumont and Crawford, were found to have been significantly lower than the other schools in terms of student scores on two of the three C. M. I. scales. One, therefore, must question the accuracy of the activity reporting process at this level. In doing so, two possible explanations seem reasonable; that two schools underreported, or two schools over-reported the level of activities. To conclude that a reduction of career education activities on the part of the teachers would result in an increase in the production of student career education outcomes hardly seems reasonable.

At the elementary school, no significant differences between the schools were found in the production of student outcomes at the sixth grade. This, of course, prevents an analysis of the relationship between the level of teacher activities and production of student outcomes

At the 3rd grade level, however, one of the two pilot schools, James Lane Allen, was found to have posted test results that were significantly higher than the other six schools. That school also reported the highest utilization of resource people in the classroom than the other schools. With respect to the other surveyed activities and resources, however, the school ranked low in the reported level of use.

The results suggest that at the elementary level, the use of resource people and the level of training may be important factors in improving self-esteem. It may also be that the reporting system was not broad enough to isolate the important variables in the production of the student outcomes.

C. Principal Questionnaire

Earlier it was noted that the project expanded its focus of operation greatly this year. It was also noted that the project resources were not significantly increased to accommodate the new focus. To compensate for the larger responsibilities project staff anticipated that individual schools would elect to devote some portion of their discretionary in-service training resources to furthering the project's objectives. Essentially, such a commitment would require a decision on the part of each principal. Therefore, the project staff were interested in determining the principal's understanding of career education. They also were interested in determining if the principal's views with respect to career education would be altered as a result of the project's activities during the year.

In assessing attitudes and changes in them, a questionnaire was developed around the USOE policy paper "An Introduction to Career Education" by Dr. Hoyt, used in developing the teacher questionnaire. The questionnaire was administered on a pretest/posttest basis to the principals and assistant principals in the system.

The principals were first asked two sets of questions relating to the responsibilities or activities of classroom teachers with respect to implementing career education in the school. The first set asked if the principals agreed that the set of activities detailed by the USOE policy paper were the responsibility of classroom teachers. The second set of questions then asked if the principals felt that their teachers had been trained adequately to fulfill the responsibilities outlined. The results of the survey are presented in Table 13.

As the table indicates, 20 of 25 school administrators completed both questionnaires, one administered in September 1975 and one in May 1976. The first question related to the activities listed in the table. The principals were asked "In your opinion should it be the responsibility of classroom teachers to ...." The responses to this question are recorded in columns (a) and (c) and are expressed as the percent of respondents in agreement that the given activity should be the responsibility of classroom teachers. The results may be interpreted as agreement (or disagreement) with the USOE policy concerning the appropriate role of classroom teachers in implementing career education. To the extent that the principals agreed with each statement, they were in concert with the USOE policy paper. The table reveals that on the pretest the

TABLE 13

PERCENT OF PRINCIPALS AGREEING THAT THE LISTED ACTIVITIES WERE THE RESPONSIBILITY OF CLASSROOM TEACHERS AND THAT THEIR TRAINING HAD PREPARED THEM FOR THOSE RESPONSIBILITIES

ACTIVITY	PRETEST		POSTTEST	
	Teachers		Teachers	
	Responsibility to % Agree	Trained to % Agree	Responsibility to % Agree	Trained to % Agree
	(a)	(b)	(c)	(d)
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	70	60	75	60
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation	100	70	100	75
c. Help pupils acquire and utilize good work habits.	100	85	100	90
d. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.	100	60	100	80
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	100	35	90	55
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society	40	10	50	15
g. Help students acquire job-seeking and job-getting skills.	75	60	80	65
h. Participate in the job-placement process.	15	10	20	10
i. Help students acquire decision-making skills.	100	85	90	85

N = 20

principals were in complete agreement with each other and the USOE policy paper that five of the nine activities were teacher responsibilities. On only two items did the majority of principals disagree with the policy paper. They did not feel that it was the responsibility of the teachers to provide students with specific entry level vocational competencies and they did not think that teachers were responsible for participating in the job placement process.

On the posttest, after a year of project involvement, the majority of the principals indicated that they were in agreement (50 percent or more) with all but the job placement question. However, they were no longer unanimous in endorsing two other items.

The remaining two columns (b and c) report the responses of the principals to the question "In your opinion, has the training of your teachers prepared them to ...." It can be seen that the principals were not in complete agreement on any item. It is interesting to note that, in general, the principals were in more agreement concerning the adequacy of training after their year of exposure to the project than before. In terms of change from the pretest responses to the posttest responses, the principals were in general agreement with the USOE policy paper and did not alter their views much after the implementation year.

Their overall increase in the adequacy of career education training might be explained in several ways. The most obvious of these would conclude that after a year's exposure, the principals themselves were better versed in the precepts of career education and therefore better able to judge training. A second and more plausable explanation considers the nature of the project's reliance upon school administrators for project support this year. It would seem normal for the principals to be more accepting of those activities for which they have had partial responsibility.

The data indicates that 18 of the 20 principals who respond think that teachers should "integrate -- the programmatic assumptions of career education into their instructional activities." Yet, only half of them, (55 percent) believe that the teachers have been prepared to accomplish this. We, therefore, conclude that this is an area which could be effectively addressed in the future.

As was noted earlier, principals did not believe that teacher training had prepared their staffs to participate in the job placement process or to provide students with specific job entry level vocational skills. The data suggest, however, that these responses are a function of the principals' clear disagreement that these are appropriately teacher responsibilities.

In addition to indicating the responsibilities suggested for teachers in implementing career education, the USOE policy paper also delineates responsibilities or activities for the "business - labor - industry community," school counseling and guidance personnel and for educational administrators. The principals were also surveyed in these areas in order to assess their position with respect to career education. The questions asked and the responses are presented in Table 14.

TABLE 14

PERCENT OF PRINCIPALS RESPONDING WHO AGREE
WITH NON-TEACHER RELATED CAREER EDUCATION ACTIVITIES

ACTIVITY	PRETEST % Agreeing N = 20	POSTTEST % Agreeing N = 20
In your opinion, should the business-labor-industry community:		
Provide observational, work experience, and work-study opportunities		
For students.	95	90
For those who educate students.	90	85
Serve as career development resource personnel for teachers, counselors, and students.	90	90
Participate in part-time and full-time job placement programs.	95	80
Participate actively and positively in programs designed to lead to a reduction in worker alienation.	80	80
Participate in career education policy formulation.	90	90
In your opinion, should Counseling and Guideance Personnd:		
Help classroom teachers implement career education in the classroom.	90	90
Serve, usually with other educational personnel, as liaison contacts between the school and the business-industry-labor community.	90	85
Serve in implementing career education concepts within the home and family structure.	60	50
Help students in the total career development process, including the making and implementation of career decisions.	70	70
Participate in part-time and full-time job placement programs and in followup studies of former students.	50	40
In your opinion, should educational administrators and school boards:		
Emphasize career education as a priority goal.	85	90
Provide leadership and direction to the career education program.	95	100
Involve the widest possible community participation in career education policy decision making.	85	80
Provide the time, materials, and finances required for implementing the career education program.	95	100

It should be noted that the focus of the project was upon teachers and the analysis of the principal questionnaire responses focused primarily on this area. In reviewing the responses in Table 12, three points of interest stand out. The first is that principals did not tend to alter their viewpoint concerning career education to a significant degree after a year's exposure to the project. They were also in substantial agreement on most points concerning the roles of business counseling, staff, and administrators. They were in total agreement on only two items in the three sets of questions. They all indicated that the leadership direction and resources for implementing career education programs were the province of school administrators and policy boards.

On two items relating to the responsibilities of counseling and guidance personnel the principals failed to approach consensus. Half of them did not agree that the counseler's role included working to implement career education concepts within the home. Only 40 percent did not feel that guidance personnel should participate in job placement programs and in student followup studies.

D. Eastern Kentucky University Preservice Training Questionnaire

Education students graduating from Eastern Kentucky University were administered a questionnaire containing the career education items used with both teachers and principals in an attempt to determine how, if at all, they differed from project teachers. A total of 129 questionnaires were returned by the students which were divided into two groups: those students emphasizing general academic subjects and those emphasizing career oriented subjects. The results are presented on Table 15.

TABLE 15

PERCENT OF EASTERN KENTUCKY UNIVERSITY STUDENTS AGREEING WITH THE FOLLOWING CAREER EDUCATION STATEMENTS AND AGREEING THAT THEIR TRAINING IN THOSE AREAS WAS ADEQUATE

ACTIVITY	CAREER ORIENTED N=27		ACADEMIC ORIENTED N = 102	
	% agree	% trained	% agree	% trained
a. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.	93	78	87	58
b. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.	93	70	90	61
c. Help pupils acquire and utilize good work habits.	96	78	95	61
d. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.	96	67	90	64
e. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.	56	48	65	32
f. Provide students with specific vocational competencies at a level that will enable students to gain entry into the occupational society.	93	85	72	32
g. Help students acquire job-seeking and job-getting skills.	93	74	77	40
h. Participate in the job-placement process.	85	44	43	20
i. Help students acquire decision-making skills.	89	84	94	75

It can be seen that more preservice trainees were in agreement with the principles of career education than felt that their training had adequately prepared them. This pattern is similar to the one observed with teachers. In general, the preservice trainees were more in agreement with the USOE policy paper than were the teachers surveyed from the project schools. The career oriented preservice trainees were more in agreement in general than the academically oriented.

Most noteworthy are the responses to items f through h. Eastern Kentucky University (EKU) were much more willing to agree that it was the responsibility of classroom teachers to participate in placement, to help students acquire job-seeking skills, and to provide them with entry level competencies than were the Fayette County teachers. The EKU students were also more inclined to think that their training had prepared them to accept those responsibilities than were the project teachers.

A similar pattern of responses was observed last year. It appears to DA that these responses are reflective of the lack of experience of the EKU students. Classroom teachers respond in terms of their knowledge of the actual day-to-day burdens placed upon them. They are careful about seeking additional commitments. The preservice students, on the other hand, are untried, enthusiastic, and inclined to respond in terms of an ideal concept of the teaching world. In the absence of specific knowledge of their limitations, they were more willing to respond affirmatively to the items.

E. Financial Resources and Expenditures

Expenditure data were collected and analyzed for the first three quarters of the program year. Final figures for the fourth quarter were not available at the time of the data collection because the project was still operating in this final quarter. Expenditure data was sought in two forms. The first form was by the budget categories used by the USOE in making the grant and is reported in Table 16. The second form was by grade levels or activity areas as reflected on Table 17.

Reviewing Table 16 reveals that the project expended 73 percent of its budget during the first three quarters with only slight variations from quarter to quarter. Projecting these expenditures, one would expect the project to have expended $146,196 at the end of the fourth quarter. This represents 97.4 percent of the total amount budgeted for the year. There are, however, some one-time expenses associated with closing-out the project leading the project staff to predict that the final figure will be within one percent of the amount budgeted.

The budget indicates that the majority of the project's resources were being devoted to personnel costs including benefits. These costs constituted 78 percent of the total Part D budget. The expenditures through the third quarter reflected 79.7 percent of the project's costs and were actually devoted to personnel costs. This indicates that the project is following its original plan very closely both in terms of level of effort and nature of effort.

Reviewing the expenditures by activity area (Table 17) reveals that 22 percent of the project's expenditure through the first three quarters were at the elementary school level, 22 percent at the junior high school level, and 19 percent at the high school level; 38 percent of the project's expenditures were reported for the administrative category, which includes those expenditures affecting all grade levels as well as regular administrative charges. The cost of this evaluation, for example, is included in the administrative category.

The expenditures between grade levels are found to be relatively constant from quarter to quarter with the second quarter being somewhat lower due to the December holiday season. During that quarter, the administrative category cost went down almost 50 percent. This resulted from the decreased expenditures in the grade level categories coupled with several calendar year-end billings for expenses incurred throughout the first two quarters.

TABLE 16

BUDGET CATEGORY EXPENDITURE FOR THREE-QUARTERS 1975-1976 SCHOOL YEAR

Budget Item	Budget		First Quarter		Second Quarter		Third Quarter		Three-Quarter Total	
	Part D	Other	Part D	Other	Part D	Other	Part D	Other	Part D	Other
A. Personnel										
1. Staff	85,753	25,765	21,438	6,441	21,438	6,441	21,438	6,441	64,314	19,323
2. Substitute Teachers	9,000		915		929		5,705		7,549	
3. Teacher Stipends	11,740		7,318				788		8,106	
4. Out-of-State Consultants	500		100		100				200	
5. In-State Consultants	750		150						150	
B. Benefits	9,421		2,355		2,355		2,355		7,065	
C. Travel										
1. Local - Staff	4,550		1,056		938		1,233		3,227	
2. Out-of-State - Staff	2,500		968		274		876		2,118	
3. In-State Consultant	180									
4. Out-of-State Consultant	710		139						139	
D. Supplies and Materials										
1. Instructional Materials	3,714		584		972		496		2,052	
2. Office Supplies	1,100		271		318		179		768	
E. Communications	480		153		87		120		360	
F. Services										
1. Duplication	2,500		718		289		471		1,478	
2. Testing	500		62						62	
3. Evaluation	10,000				5,255		2,386		7,641	
G. Equipment	1,900		260		345		183		788	
H. Indirect Costs	4,839		1,210		1,210		1,210		3,630	
TOTALS	150,137	25,765	37,697	6,441	34,510	6,441	37,440	6,441	109,647	19,323

TABLE 17

PART D EXPENDITURES BY GRADE LEVEL

Activity Areas	First Quarter		Second Quarter		Third Quarter		Three Quarter Totals	
	Part D	Other	Part D	Other	Part D	Other	Part D	Other
1-6								
Personnel	8,669	1,514	5,385	1,514	7,382	1,514	21,436	4,542
Other	749		643		808		2,200	
7-9								
Personnel	8,139	2,005	5,593	2,005	7,933	2,005	21,665	6,015
Other	721		642		756		2,119	
10-12								
Personnel	6,601	2,922	5,127	2,922	6,354	2,922	18,082	8,766
Other	1,225		840		850		2,915	
Administration								
Personnel	8,617		8,617		8,617		25,851	
Other	2,976		7,663		4,740		15,379	
TOTALS	37,697	6,441	34,510	6,441	37,440	6,441	109,647	19,323

In total, the findings reveal a stable program, operating very closely to its implementation plan as reflected in the budget. There do not appear to have been any significant changes in priorities or any delays or obstacles in implementation. This stability and close approximation to the budget suggests a very well managed program that is operating smoothly according to plan.

IV. CONCLUSIONS

IV. CONCLUSIONS

The conclusions discussed in this section are presented in two subsections. The first one contains a discussion of the overall conclusions based upon the analyses presented earlier. The second presents in summary form the answers to the study questions required by the USOE guidelines.

A. Overall Conclusions

The ultimate objective of this study was to determine if the activities of the Cooperative Career Education Project resulted in the production of student outcomes. In seeking to study the effects of project activities a complex study design was required. This design sought to study the effect of the project upon teachers, principals, and students. It also sought to study the relationship between the amount of training that teachers had and the level of career education activities they undertook, and the relationship to training and activities to the production of student outcomes.

High School Level

At the high school level, it was expected that the students in Lafayette would have significantly higher test scores than those of the other schools. This expectation was based upon Lafayette being a pilot school involved in the project for three years as opposed to one year for the remaining schools. This meant that Lafayette teachers would have a higher level of training and that the students should have had greater exposure to career education. The findings that Bryan Station students scored significantly higher than those from Lafayette on two of the three CMI scales was unexpected. In analyzing the teacher responses to the questionnaire it was found that the Lafayette teachers were generally more in agreement with the USOE policy paper on career education than the teachers at Bryan Station or Tates Creek. This result was expected based upon the larger involvement of the pilot school teachers with the project.

With respect to career education activities reported by teachers, it was found that Bryan Station reported more activities in three of the five areas reported and was close to Lafayette in the remaining two areas, meaning that Bryan Station reported a higher level of activities than did Lafayette. Thus, it would appear that the higher level of career education activity at Bryan Station would be a reasonable explanation for the student scores.

Teacher responses suggest that the project training did result in teacher outcomes and that the more extensive involvement of the pilot school teachers produced greater agreement with the USOE policy paper. DA concludes that the pilot school teachers at the high school level did possess a greater understanding of career education but that the higher level of career education activity by Bryan Station was responsible for the greater student gains observed. The reduction in the level of project support at the pilot school may have been perceived by teachers as a reduction in commitment to career education. This, coupled with the perceived higher level of support at Bryan Station, may explain the failure of the better trained teachers to produce the greater student outcomes.

Junior High Level

At the junior high level, it was found that the students of Jessie Clark and Southern scored significantly higher than those of Beaumont and Crawford on two of the three scales of the C. M. I. Beaumont was a pilot school and scored higher than Crawford on one of the three scales.

A single item (job placement) on the teacher questionnaire seemed to differentiate the pilot school responses from the other schools. More pilot school teachers agreed that classroom teachers should be involved in the placement process which appears to reflect their understanding of career education.

In terms of activities reported, the two schools which posted the greatest student test score gains also reported the least amount of activities. This, of course, is the reverse of what one would expect and we are unable to explain this with any certainty. However, it is possible that the study design was not sensitive to the junior high level treatments. It is also possible that the problem is the nature of the activity reporting process and that several of the first year-schools underreported.

Elementary Level

At the elementary school level, students were tested at the 3rd and 6th grades. The findings did not reveal any differences between the schools at the 6th grade level. At the 3rd grade level, it was found that the students at one pilot school, James Lane Allen, scored significantly greater gains than the students at all of the remaining six schools.

In reviewing the questionnaire responses, no pattern was observed which set the pilot schools apart from the others. In reported activities, however, Garden Springs reported the highest overall level of activities, ranking first in three of the five reported areas and second behind the other pilot school in another area.

It was expected that the higher trained pilot school teachers would report a higher level of activities than the first year schools.

With no clear teacher activity data to explain the student outcome results, DA concludes that the greater gains at James Lane Allen were, in part, the results of the three-year teacher training effort of the project at that school.

In reviewing the principals' responses to questions about career education, it was found that principals were more in agreement with career education after exposure to the project. It was also found that one result of the principals' involvement with the project was that they were more inclined to view teacher training as more adequate than before. From this, DA concludes that close involvement of principals has resulted in both greater understanding and acceptance of career education and career education activities.

B. USOE Study Questions

The USOE specified six questions to be addressed by this evaluation. As discussed earlier, these questions were reworded, where necessary, to make them appropriate to this project. The questions and the answers developed as a result of this study are presented below:

Question 1A: Did students in more intensively involved schools demonstrate a greater increase in self-awareness than students from less involved schools?

At the sixth grade level they did not, and at the third grade they did. The results indicated that in one of the pilot schools third grade students made significantly greater gains than at the other schools.

Question 1B: Did seniors with higher teacher training indices demonstrate a greater increase in self-awareness than those with lower indices?

Yes. The students with higher indices were found to have made significantly greater gains on the C.M.I. scale "Knowing Yourself" than the students with the lower indices.

Question 2A: Do students in more intensively involved elementary schools demonstrate a greater increase of a; d knowledge about work than students in less involved schools?

No. The measure of this student outcome area was the Minnesota Affective Assessment Questionnaire for career education. No differences were observed between the schools at either the 3rd or 6th grade.

Question 2B: Do seniors with higher teacher training indices demonstrate a greater increase in knowledge about work than students with lower indices ?

No significant differences between the two groups were found on Part II of the C.M.I. "Knowing about Jobs." When the student responses were compared on the basis of classroom activity reported by the teachers, it was found that the high school reporting the most activity also made significantly greater gains on Part II of the C.M.I. ; this school was not a pilot school. DA concludes, therefore,that the differences observed resulted from the higher levels of career education activity. This makes comparison based upon teacher training impossible since such a comparison necessarily assumes comparable levels of treatment.

Question 3A: Have 12th grade students with high teacher training indices demonstrated greater competency in career decision-making skills than those with lower indices?

DA concludes that this question cannot be answered for the same reasons as stated for Question 2B above.

Question 4A: To what extent do teachers consider placing students on jobs as part of their responsibility?

Teachers were found to be substantially in disagreement about the teacher's responsibility to participate in the job placement process. A higher percentage of high school teachers (36 percent) agreed with this principle than elementary (27 percent) or junior high school teachers (20 percent).

Question 5: To what extent has the project expanded job preparation activities (including work experience and cooperative education) in grades 10-12?

The project did not address the expansion of job preparation activities directly. Therefore, by agreement with project staff, no procedure was employed to assess this area.

Question 6: How were the financial resources from Section 142 (c) on Part D of P. L. 90-90-576 expended at grade levels K-3, 4-6, 7-9, and 10-12 for the first three quarters of the 1975-76 school year?

In general, the findings suggest that the program was stable and operating very closely to its implementation plan as reflected in the grant package and budget. No significant changes in priorities of implementation delays are indicated by the expenditure data.

SUMMARY

Significant differences in student test scores between schools were found at the 12th, 9th, and 3rd grades. At the 12th grade, the data tend to suggest a relationship between the level of career education activity reported by teachers and the level of student gains.

At the elementary level, a pilot school was found to produce significant student gains in self-awareness suggesting a relationship between the level of training or length of involvement with the project and the production of student outcomes.

The data were insufficient to suggest reasons for the differences observed at the junior high level. Because of these findings, DA concludes that the project was able in some cases to demonstrate that intensity of teacher training and classroom activity can affect the production of student outcomes. The project also demonstrated that teachers with longer project involvement demonstrate a greater understanding of career education than do others at the senior high school.

In summary, Development Associates concludes that the findings suggest that the Kentucky Career Education project has been successful in both training teachers and principals and in producing the student outcomes sought by the U. S. Office of Education.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Statements which follow have resulted from project evaluations, data collection during the conduct of the projection, and observations of the project staff. For more specific results, the reader may want to examine the third-party evaluation report in the previous section of this report.

Conclusions

Installation in Schools. The greatest amount of effort was directed at the four (4) pilot schools as can be seen in Figures I through X in this report. Most of this activity took place during the first two years of the project as specified in the project. The same figures also show that staff from all of the schools in Fayette County have been involved in inservice activities during the three years of the project. It was the goal of the project to reach all schools with at least a minimum of inservice and to have a few staff in each school with a more than superficial understanding of career education. This was done to assist with continuation of career education beyond project funding.

Non-Pilot Schools Yield Results. There is some evidence that some non-pilot schools accomplished as much as pilot schools. While there are no data to specifically support this finding, it can be estimated that the staff in the non-pilot schools engaged in career education activities because of their own interest rather than because of the stimulus from an outside source. Also, there is some indication that the leadership (principal) in the schools also influenced the performance of the staff.

Relationship Between Leadership and Staff Acceptance. Other projects have found that there is a direct relationship between the enthusiasm of the school leadership and the quality of the participation of the staff. That finding is also supported by this project. Without such support, from the leadership, it is questionable whether efforts should be expended.

Staff Development. Some of the most significant findings of the project related to staff development. Below are some of the findings.

1. There is a direct relationship between the amount (number of hours) of staff development and the involvement of staff in implementation of career education activities. Those staff who were more heavily involved in staff development activities also were more active in implementing career education in the classroom.

2. Staff development activities, beyond a minimum of introductory information, yield greater results when they were goal oriented. That is, it appears that staff respond to inservice more readily when they have specific goals to accomplish.

3. There may be some benefits gained from distributing staff development experiences over a period of time with regular intervals between meetings rather than attempting to accomplish the same experiences in a continuous situation.

4. From a cost effectiveness point of view, college type courses may yield more than "in-house" type inservice activities. This statement is valid only when the students (staff) have the opportunity to engage in activities which are related to their school responsibility.

Community Involvement. It is essential to develop effective community involvement for a career education effort to be successful. These relationships are necessary if students are to gain a sufficient understanding of the world of work. Some additional conclusions about utilization of community resources follow.

1. Considerable time is required to effectively involve community resources.

2. Once community contacts have been identified it is essential that the resources be used.

3. Traditional schedules in the secondary schools inhibit the use of community resources.

4. It is erroneous to assume that teachers know how to plan for and utilize community resources.

5. School staff need aids to help them reduce the time required to identify community resources.

6. Effective involvement with the community can help give visibility to the program.

Ambiguity Creates Problems. School staffs seem to respond in a more negative manner to ambiguous guidelines than to autocratic guidelines. More specifically, staff seem to find some security when they are given specific direction. Conversely, staff seem to become frustrated when confronted with abstract concepts that require the staff members to generate the specific details. However, after extended involvement, staff are much more able to deal with abstractions or open-ended problems related to the topic.

Material Development of Limited Value. The development of materials in a project such as the one described in this report has only limited value beyond the limits of the specific project. Possibly the greatest value is that of having a vehicle with which to get staff involved. Such materials may be effectively used within the system to stimulate ideas among other staff and could provide ideas to school staffs outside the system. However, the level of funding for projects like this one is not sufficient enough to develop materials with enough validity and reliability for wide use.

School Staff Activity Effective Evaluation Criteria. While the most important measure of project success is probably student performance as measured by multiple instruments of evaluation techniques, short-term projects will rarely yield meaningful differences among students. In addition, instruments have only limited validity and/or reliability. As a short-term measure, school staff implementation activities may yield more meaningful information than student data.

Continuation Beyond Funding. Planning for continuation of activities must begin very early in the project if continuation is to be implemented at the end of the project. Accomplishment of project goals will not necessarily result in continuation. Procedures and strategies should be used which will maximize the chances for continuation of activities beyond the funding period.

1. Cost. When activities are introduced which have large recurring expenditures (in some cases only minimal expenditures), the chances for continuation are reduced when outside funding is eliminated.

2. Staff. This is closely related to cost because activities that require a school system to support additional staff will result in greater costs to the school. Such activities have little chance to be continued. An alternative strategy is to focus on staff independence for carrying out the activities.

3. Administrative Leadership. It is doubtful that any continuation of activities can be expected unless those in leadership positions give their support to the continuation.

4. Community Support. With effective community support, school staff will have visible credibility, if not a mandate, for continuation of the activities.

5. Continued Visibility. At the end of a project, there is a tendency for the school staff to "let-down". This can be offset if the leadership continues to give visibility for career education.

6. Evaluation Essential. It is important that evaluation of activities continue as well as implementation. School staff tend to place added importance to those activities which are important enough to be evaluated.

Implications

1. When it is not possible to conduct intensive inservice for all staff in a school, it may be useful to develop a few staff to the extent that they can serve in leadership or helping roles. Such a cadre is needed to provide support to the school administration and help other teachers build confidence.

2. In certain situations effective results may be obtained in schools that engage in career education on their own initiative. Conversely, caution should be given to avoid a condition where a school staff becomes too dependent on leadership from an outside source such as a project staff.

3. Serious consideration should be given to not attempting the implementation of career education unless the leadership of the school clearly support the effort. The support must be more than merely giving verbal agreement to the concept. School staff members must observe the leadership actively participating in such activities as initiating meeting, helping staff obtain resources, reducing road blocks and red tape, following-up to see that implementation is accomplished, etc.

4. Staff development is a consideration to successful implementation of career education in the schools. There is some evidence that resources directed at staff development could be wasted unless staff are given the opportunity to move beyond a superficial understanding of the concepts of career education.

5. Staff development should be planned so that participants engage in goal oriented activities. Without such goal orientation staff encounter frustration with ambiguity. Staff can be expected to deal with abstract situations after they have internalized the fundamental concepts and have attained some success and confidence.

6. College level courses may yield staff development results which are as effective as inservice conducted by the project staff. Even when staff tuition is paid with project resources,

the use of college-level courses is more cost effective than providing substitutes for staff to participate in project organized staff development activities. However, caution should be taken to ensure that the activities of the class permit the students (school staff) to engage in planning experiences which will be useful in their classrooms.

7. Career education cannot be successful without developing meaningful relationships with many individuals and groups within the community. Such activities will require additional staff time and could conflict with established school procedures.

8. When development of materials is included as part of a project for the purpose of stimulating activity, it is important that focus be directed at helping staff become involved and not on developing marketable materials.

9. The expectation of massive or profound changes in student performance as a measure of project success may be too much to expect when applied to projects of short duration. Without evidence of success, school staff find it difficult to maintain momentum.

10. It may be useful to attempt to identify evaluation measures which are related to eventual success of students for short-term evaluation of projects.

11. Unless continuation of project activities beyond funding is a major consideration at the beginning of the project, difficulties will likely be encountered at the end of the project.

Recommendations

1. When implementation of career education must take place with large numbers of students in several schools, it is suggested that consideration be given to the development of key leaders on the staff as well as to provide orientation to other staff members.

2. Projects should be designed so that maximum implementation responsibility will rest with the school staff with a minimum of dependence on project staff.

3. Activities should not be iniated in a school unless the leadership is willing to demonstrate commitment to career education beyond verbal support.

4. Major project resources should be directed at staff development rather than on acquisition of materials.

5. Staff development activities should be directed at attainment of specific goals during the early stages of involvement.

6. Projects should consider the use of college-level courses in addition to the use of traditional methods of staff development. This, however should be considered only if the institution of higher education is willing to organize the classes to accomplish project goals.

7. Career education projects should include, as a major component, provision for developing relationships with the community.

8. Projects such as the one described in this report should not attempt to develop marketable materials because of the limited resources. However, the development of materials which are meaningful for local implementation can be useful if it helps school staffs to internalize the concepts of career education.

9. Evaluation measures, other than student performance measures, which can be isolated early in the conduct of a project and can be directly associated with project success should be identified. This would probably require examination over a longer period of time than the three years of project funding.

10. Project proposals should include the strategies to be used throughout the project to maximize the chances for continuation of activities beyond the funding period.

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